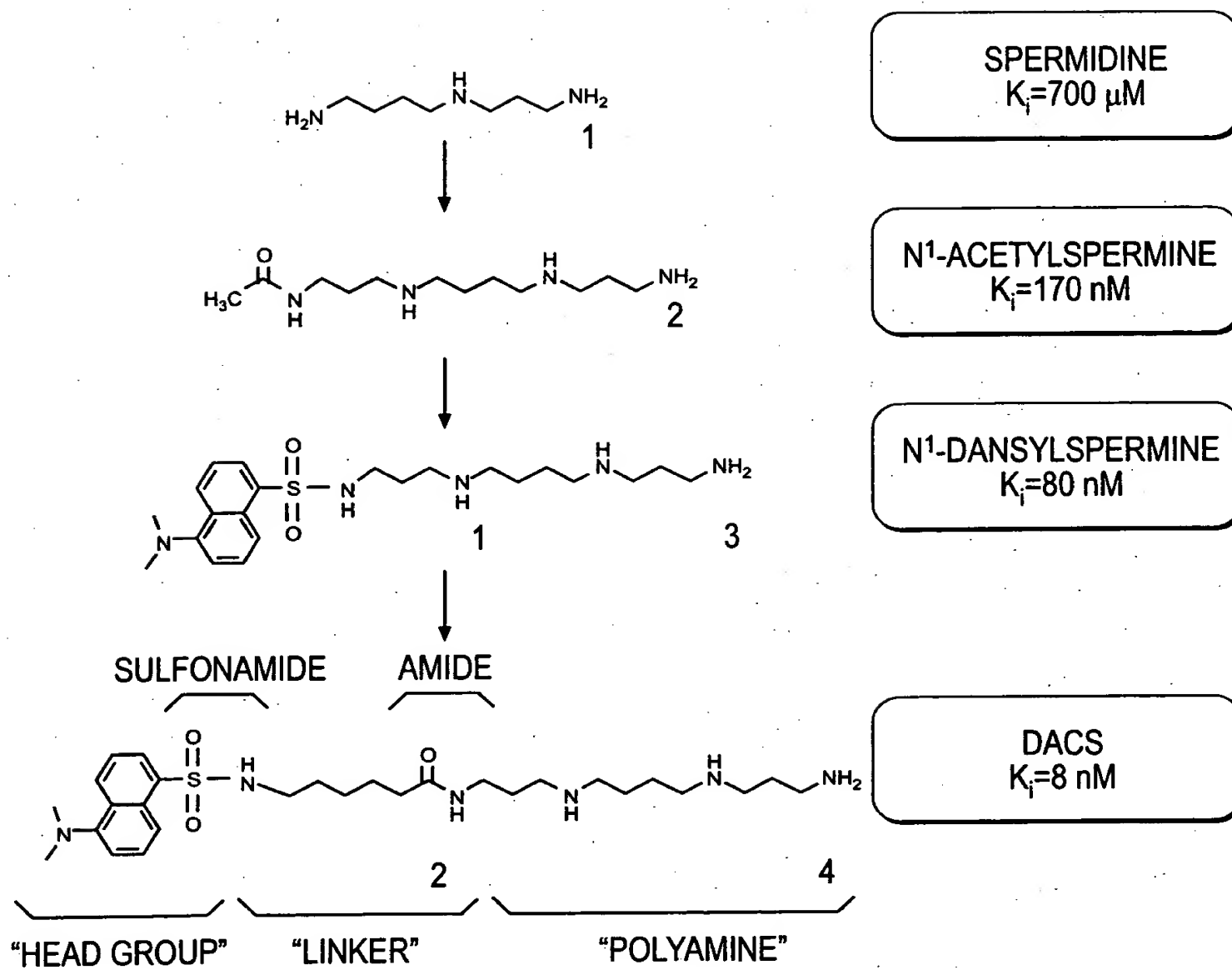
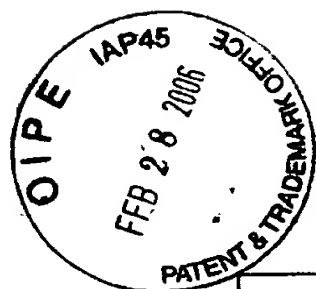


# REPLACEMENT SHEET



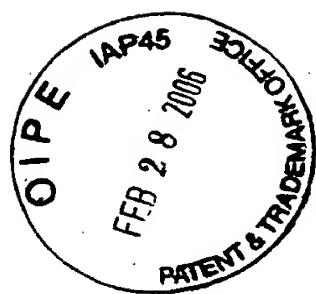
**FIG. 1**



# REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
3		0.080	20	I
4		0.010	400	IX, XIII
5		0.010	210	XIII
6		0.005	220	XIII
7		0.10	3.6	III
8		0.110	3.7	II
9		0.440	2.7	IV
10		0.050	>10	XV
11		0.190	2.4	XV
<p>a INHIBITION OF POLYAMINE UPTAKE: K<sub>i</sub> DETERMINED FROM LINEWEAVER-BURKE DOUBLE RECIPROCAL PLOTS</p> <p>b INHIBITION OF TUMOR CELL GROWTH: R IS RATIO OF IC<sub>50</sub> (COMPOUND ALONE) TO IC<sub>50</sub> (COMPOUND + DFMO)</p> <p>c NUMBERS REFER TO EXAMPLES (DESCRIBING SYNTHESIS)</p> <p>d PURCHASED FROM ALDRICH CHEMICAL COMPANY</p>				

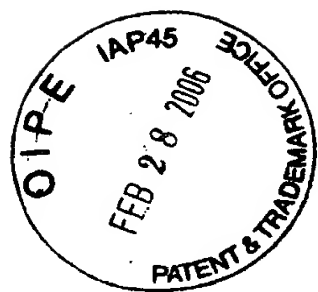
**FIG. 2**



# REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
12		0.150	4.3	XV
13		0.058	>47	XV
14		0.037	14	XVII
15		0.091	2.2	II
16		0.08	2.1	XV
17		0.43	>31	XV
18		0.083	40	XVII
19		0.24	>10	XV
20		0.28	1.0	XVII
21		0.084	1.0	XVII

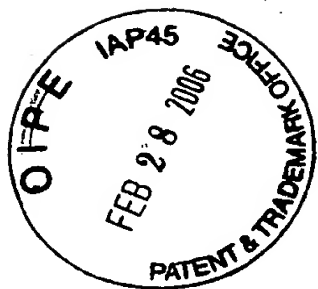
**FIG. 2 (CONT.1)**



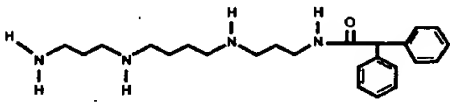
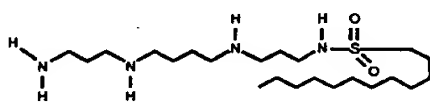
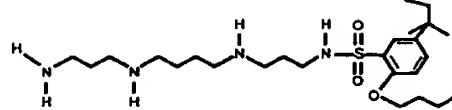
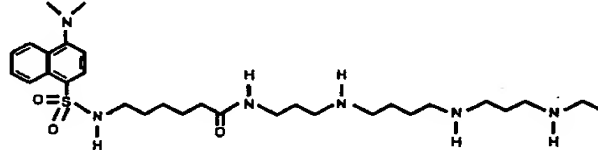
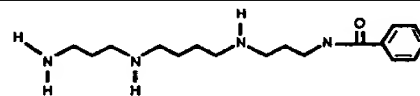
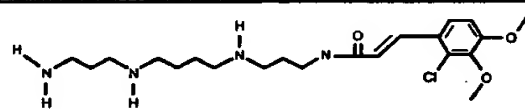
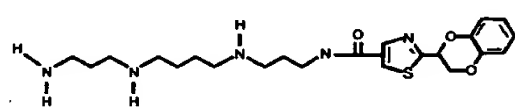
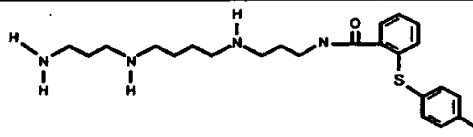
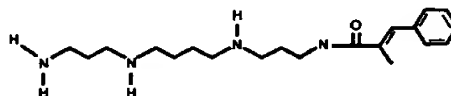
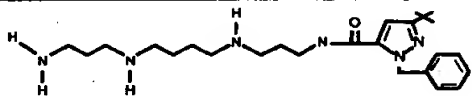
## REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
22		0.066	11	XV
23		0.250	6.2	II
24		0.23	10	XV
25		0.067	8.6	XV
26		0.180	15	XV
27		0.650	9.9	XV
28		0.054	9.3	XV
29		0.076	>46	XV
30		0.120	>10	XV
31		0.083	>12	XII

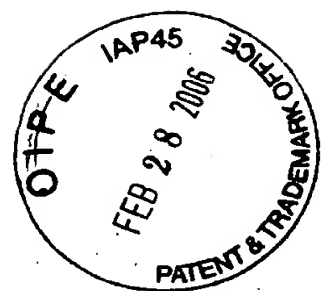
**FIG. 2 (CONT.2)**



REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
32		0.093	2.1	XVII
33		0.17	1.4	XV
34		0.120	1.0	XV
35		0.041	33	XIII
36		0.61	>2	XVII
37		0.150	2.4	XVII
38		0.140	1.0	XVII
39		0.500	1	XVII
40		0.086	18	XVII
41		0.200	1.0	XVII

**FIG. 2 (CONT.3)**

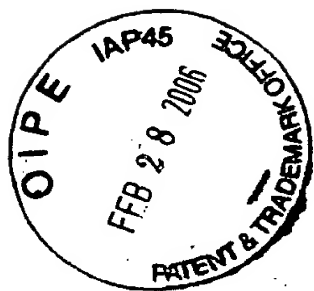


## REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
42		0.110	1.1	XIV
43		0.033	76	XVII
44		0.073	39	XIII
45		0.052	3.0	XIII
46		0.082	63	XIII
47		2.1	6.8	XII
48		0.079	>49	XII
49		0.067	3.2	XV
50		0.12	1.0	XVII
51		0.083	1.5	XV

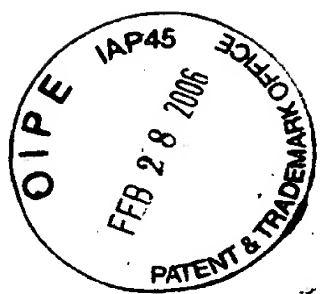
**FIG. 2 (CONT.4)**

## REPLACEMENT SHEET

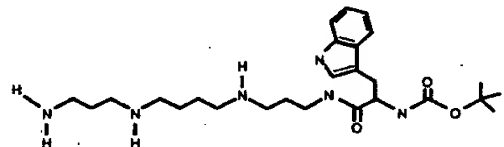
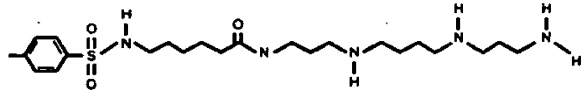
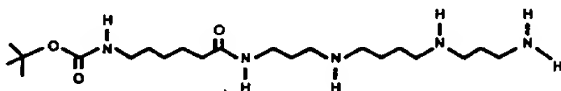
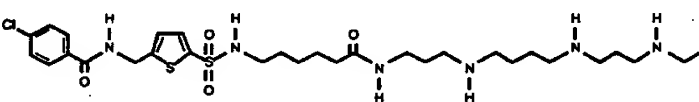
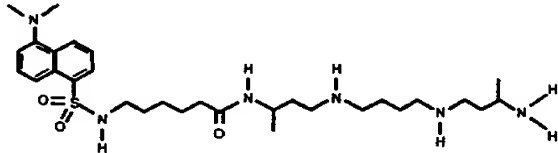
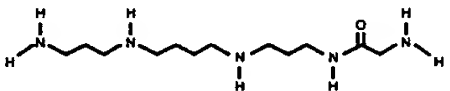
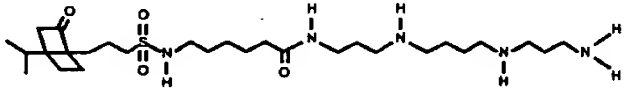
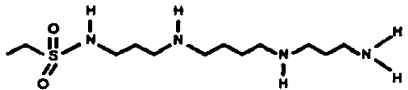
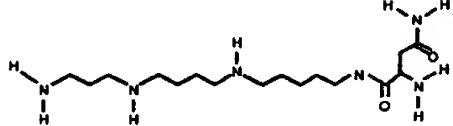
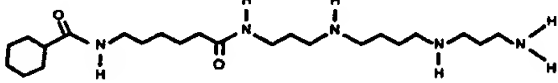


#	STRUCTURE	K <sub>i</sub> (M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
52		0.094	5.3	XV
53		0.18	1.0	XV
54		0.19	2.0	XV
55		0.079	>1.1	IV
56		0.190		d
57		0.017	170	XV
58		0.050	189	XIII
59			>1	XIII
60			>1	XIII
61		0.200	1.0	XIII

**FIG. 2 (CONT.5)**

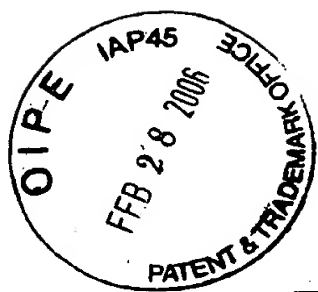


## REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
62			>2.0	XIII
63		0.050	>1	XIII
64		0.046		XIII
65		0.012		XIII
66		0.018	27	XIII
67		0.07	1.0	XIII
68		0.110	>4.4	XIII
69		0.22	1	XV
70		0.033	>12.2	XIII
71		0.160	>1.5	XIII

**FIG. 2 (CONT.6)**

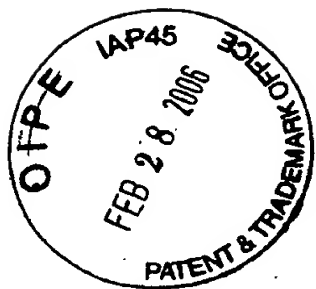




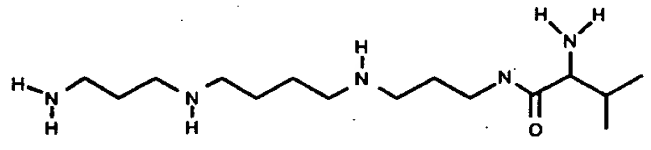
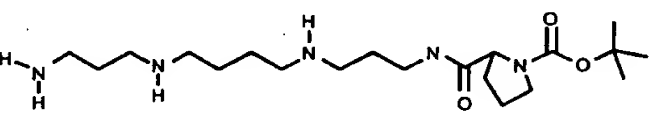
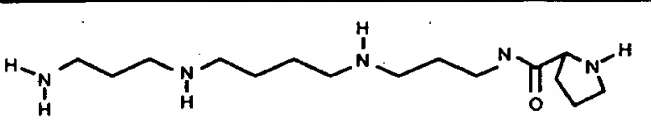
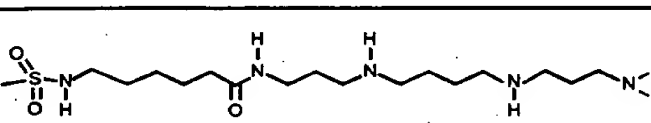
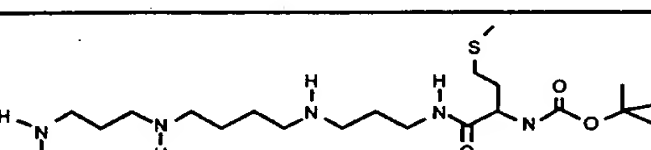
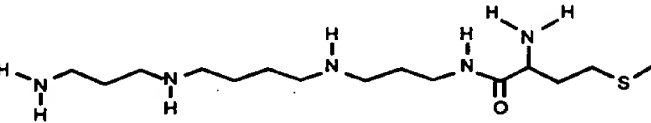
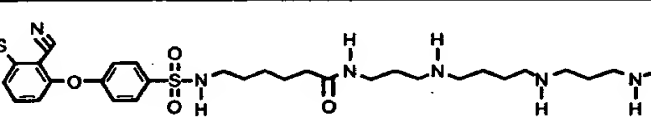
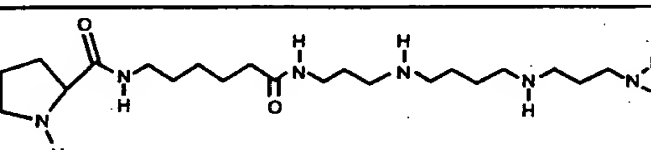
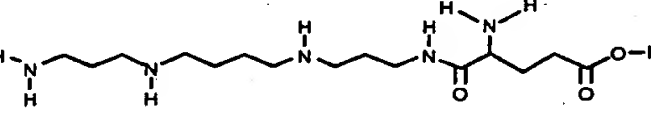
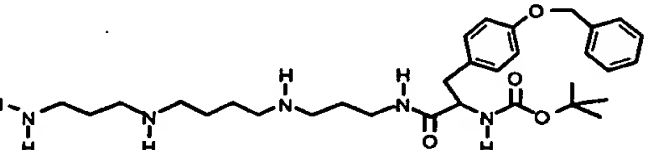
## REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
72		0.031	>100	XIII
73		0.094	>1	XIII
74		0.200	1.0	XIII
75		0.130	>1	XIII
76		0.040	1.0	XIII
77		0.093	1	XIII
78		0.156		XIII
79		0.047	1	XIII
80		0.258		XIII
81		0.0096	153	XIII

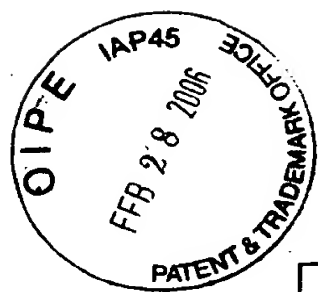
**FIG. 2 (CONT.7)**



## REPLACEMENT SHEET

#	STRUCTURE	Ki(M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
82		0.097	>54	XIII
83		0.183		XIII
84		0.036	>3.2	XIII
85		0.048	>6.5	XIII
86		0.091		XIII
87		0.034	>1	XIII
88		0.014	>40	XIII
89		0.020	>1	XIII
90		0.077		XIII
91		0.037	1	XIII

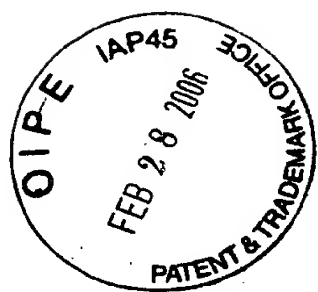
**FIG. 2 (CONT.8)**



## REPLACEMENT SHEET

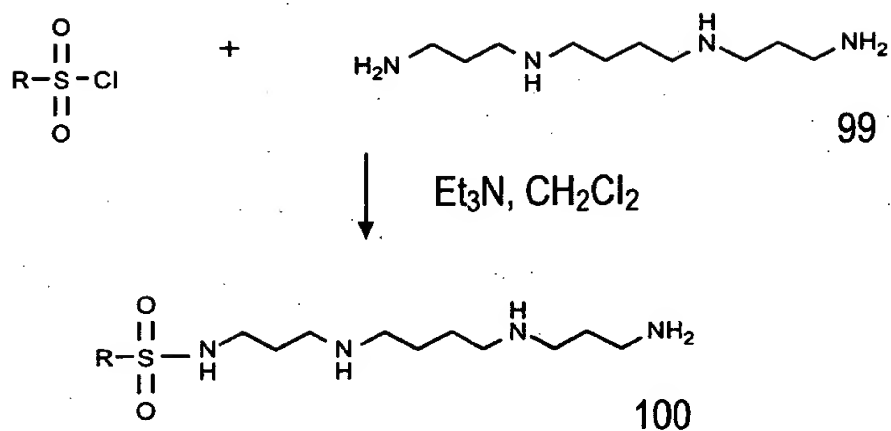
#	STRUCTURE	K <sub>i</sub> (M) <sup>a</sup>	R <sup>b</sup>	METHOD <sup>c</sup>
92		0.300	1	XIII
93		0.061	1	XIII
94		0.042	1	XIII
95		0.050	1	XIII
96		0.034	1	XIII
97		0.027	1	XIII
98		0.180	12	d

**FIG. 2 (CONT.9)**

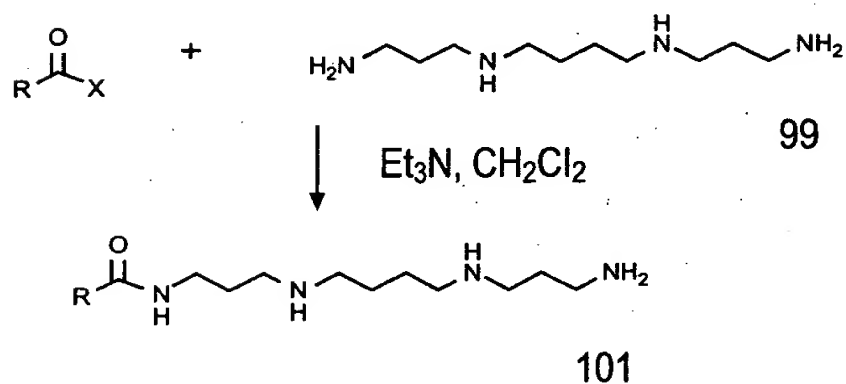


# REPLACEMENT SHEET

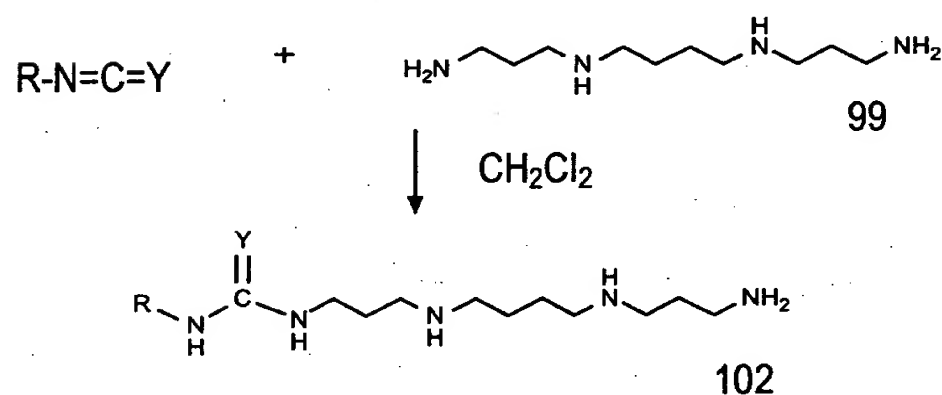
## SULFONAMIDES



## AMIDES



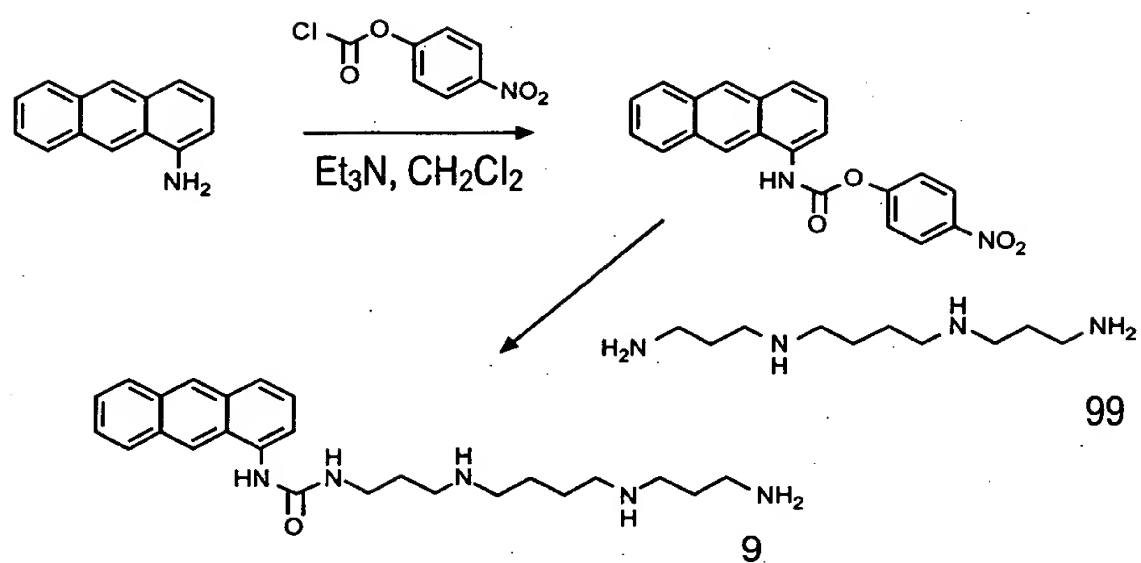
## UREAS OR THIOUREAS



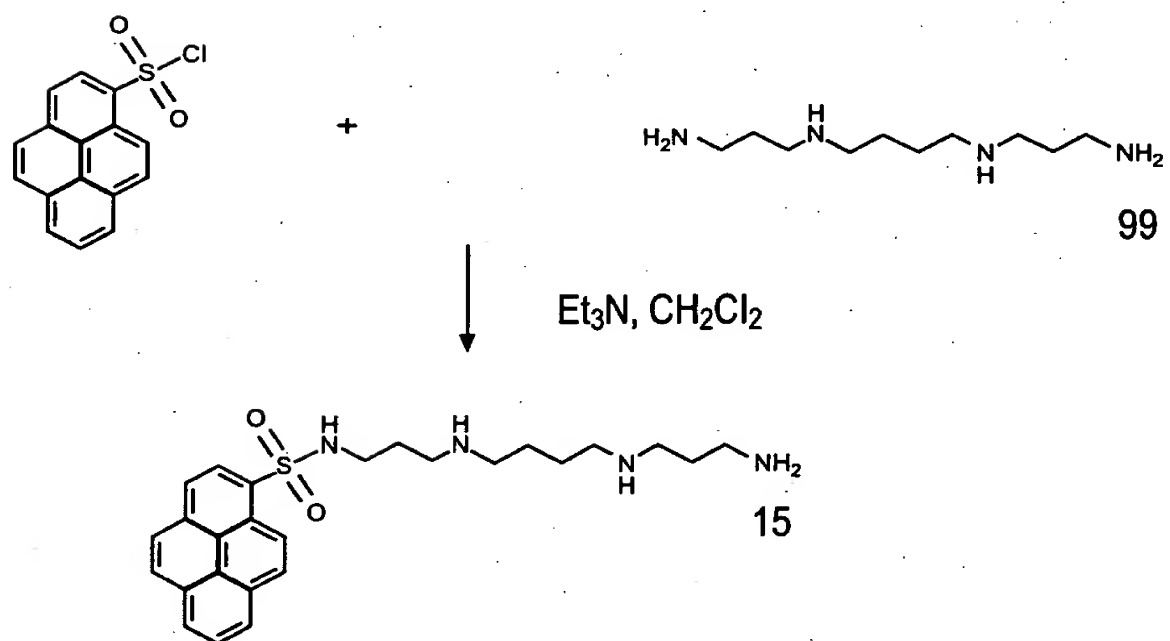
WHERE X=HALIDE OR N-HYDROXSUCCINIMIDE ESTER  
R=HEAD GROUP  
POLYAMINE=SPERMINE (OR OTHER)  
Y=O OR S OR NHR  
(CORRESPONDING TO UREAS, THIOUREAS  
AND GUANIDINES, RESPECTIVELY)

### FIG. 3

# REPLACEMENT SHEET

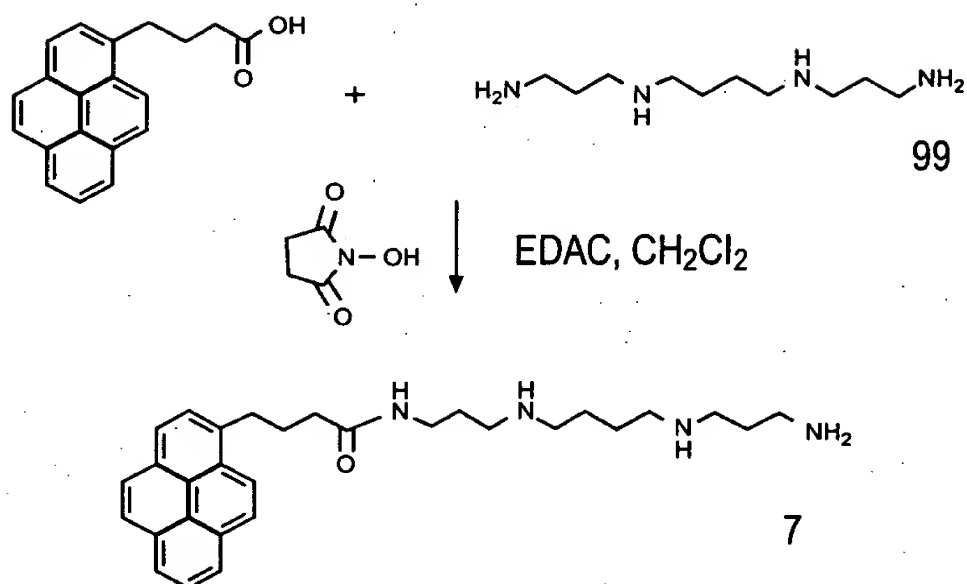
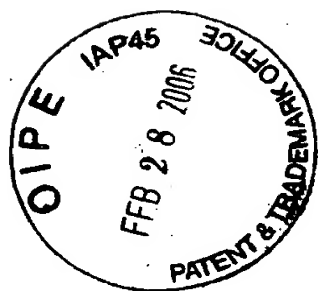


**FIG. 4**

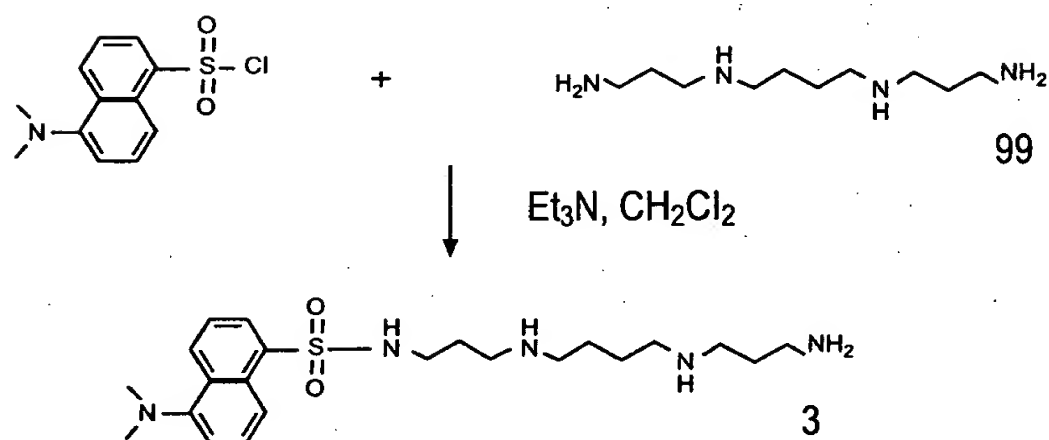


**FIG. 5**

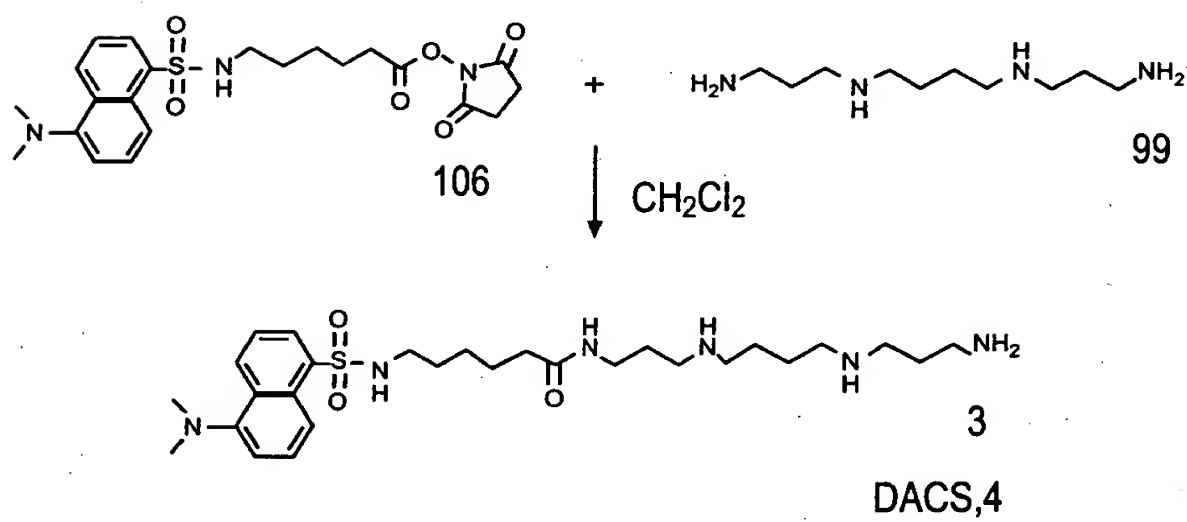
# REPLACEMENT SHEET



**FIG. 6**

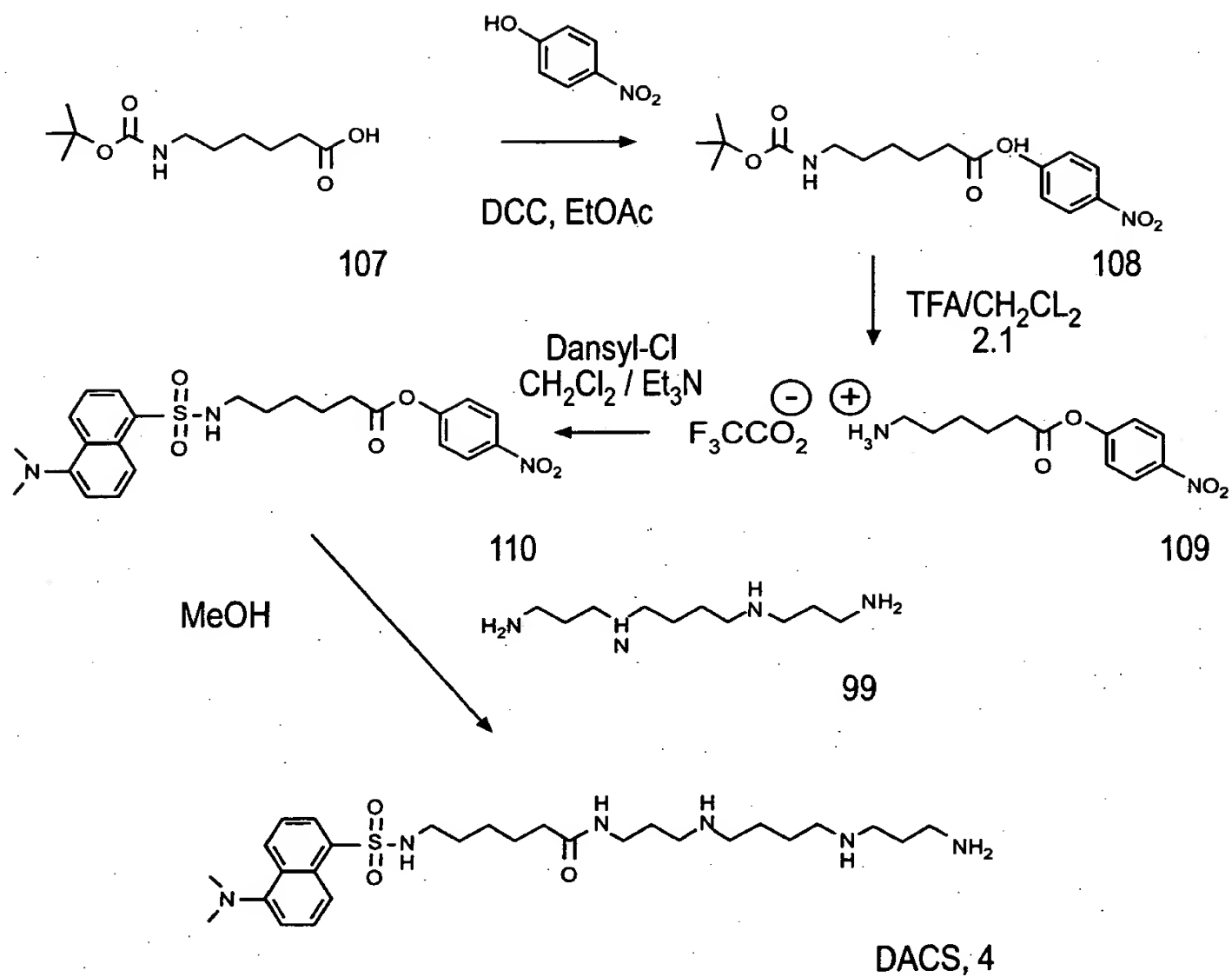
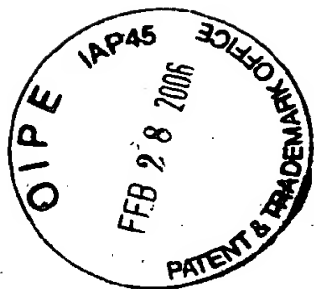


**FIG. 7**



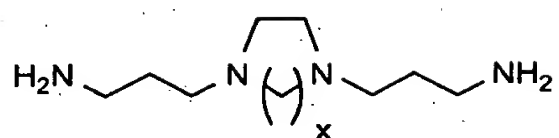
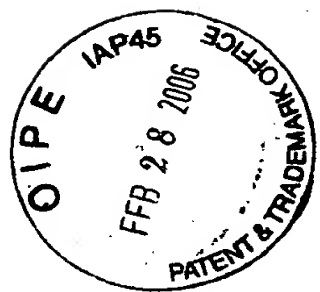
**FIG. 8**

REPLACEMENT SHEET

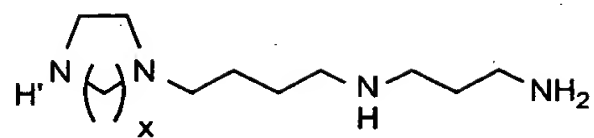


**FIG. 9**

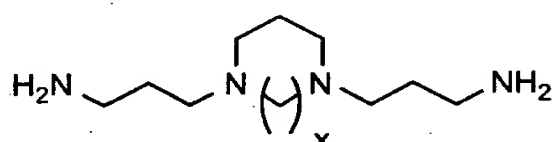
# REPLACEMENT SHEET



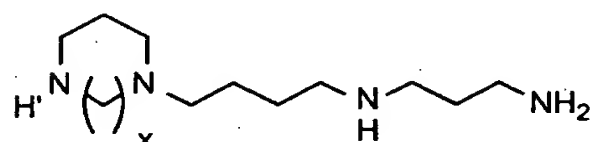
111a



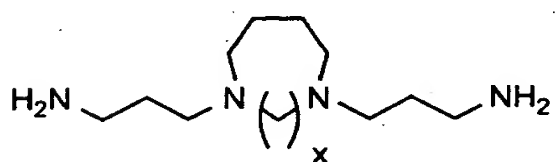
112a



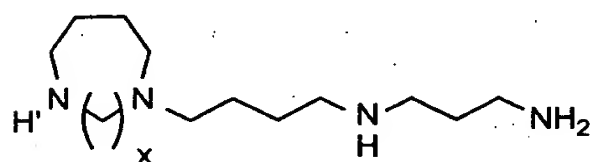
111b



112b

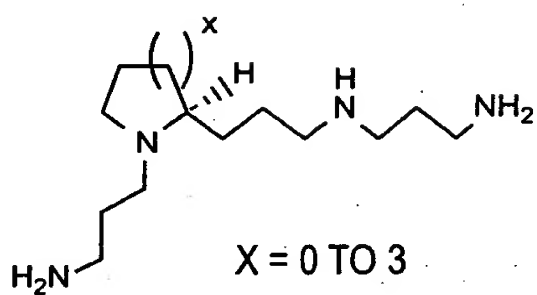


113



114

X = 1 TO 4



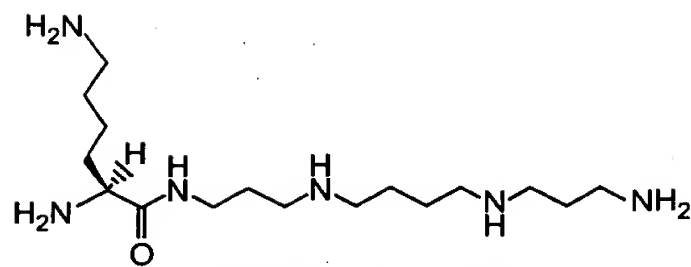
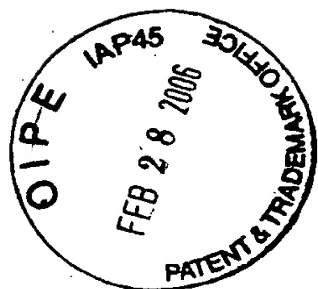
X = 0 TO 3

115

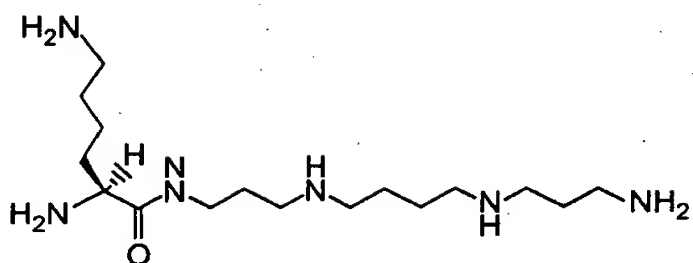
**FIG. 10**



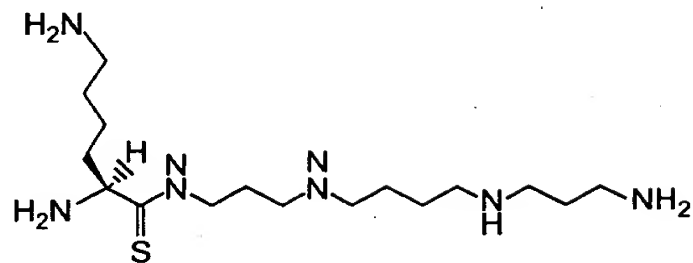
# REPLACEMENT SHEET



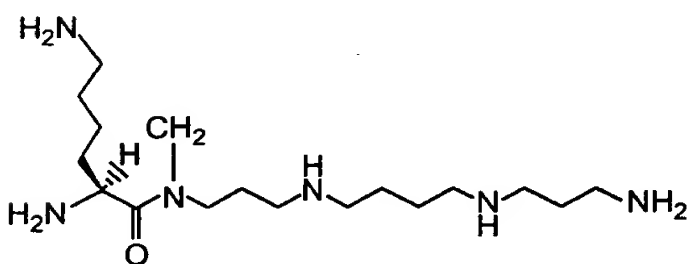
COMPOUND 1202  
L-LYS-SPM



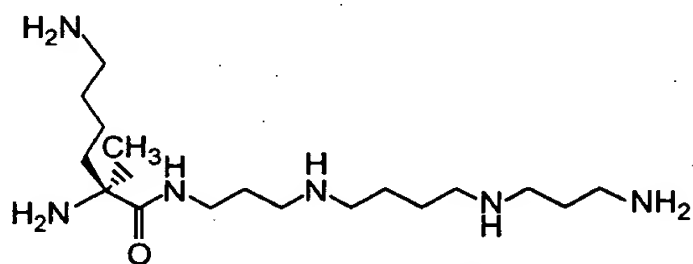
COMPOUND 1390  
D-LYS-SPM



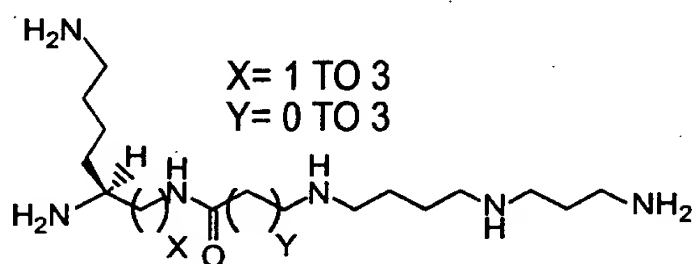
COMPOUND 1380  
L-LYS-SPM THIOMIDE



COMPOUND 1391  
L-LYS-SPM(METHYLAMIDE)



COMPOUND 1392  
L-LYS-SPM( $\alpha$ -METHYL)

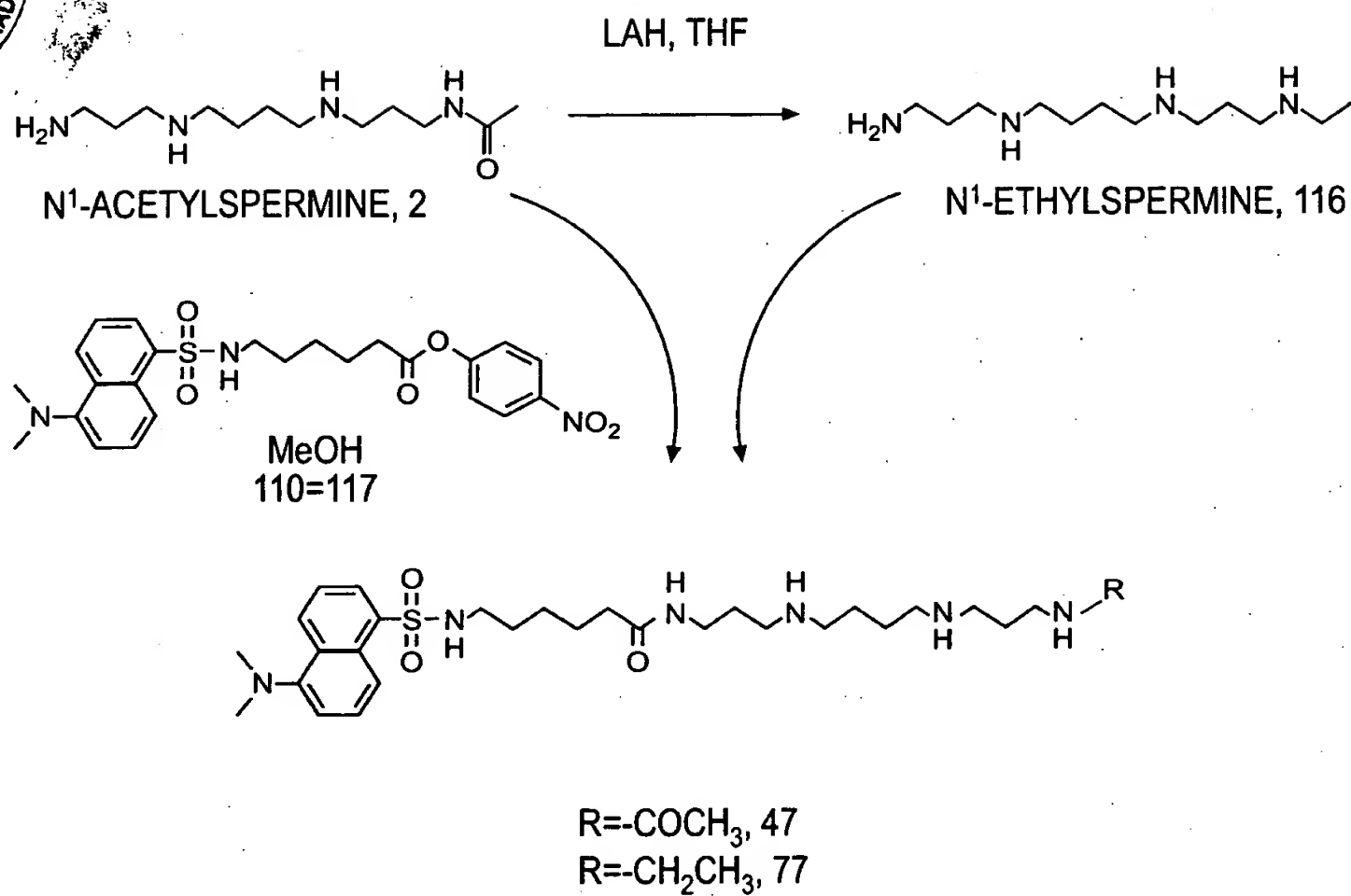
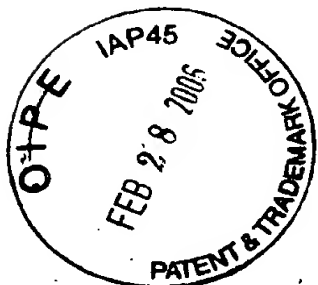
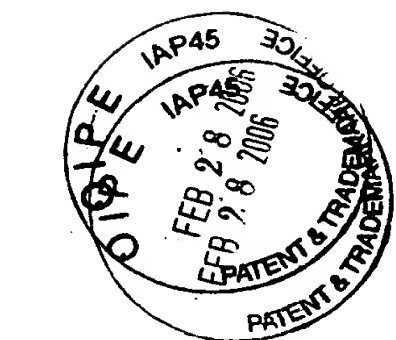


COMPOUND 1393-1405  
L-LYS-SPM(ISOAMIDE)

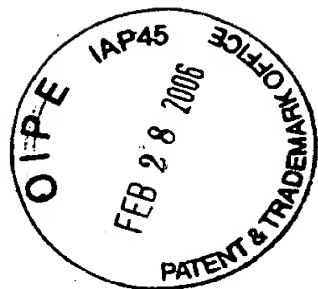
COMPOUND 1202 AND VARIATIONS THEREOF.

**FIG. 11a**

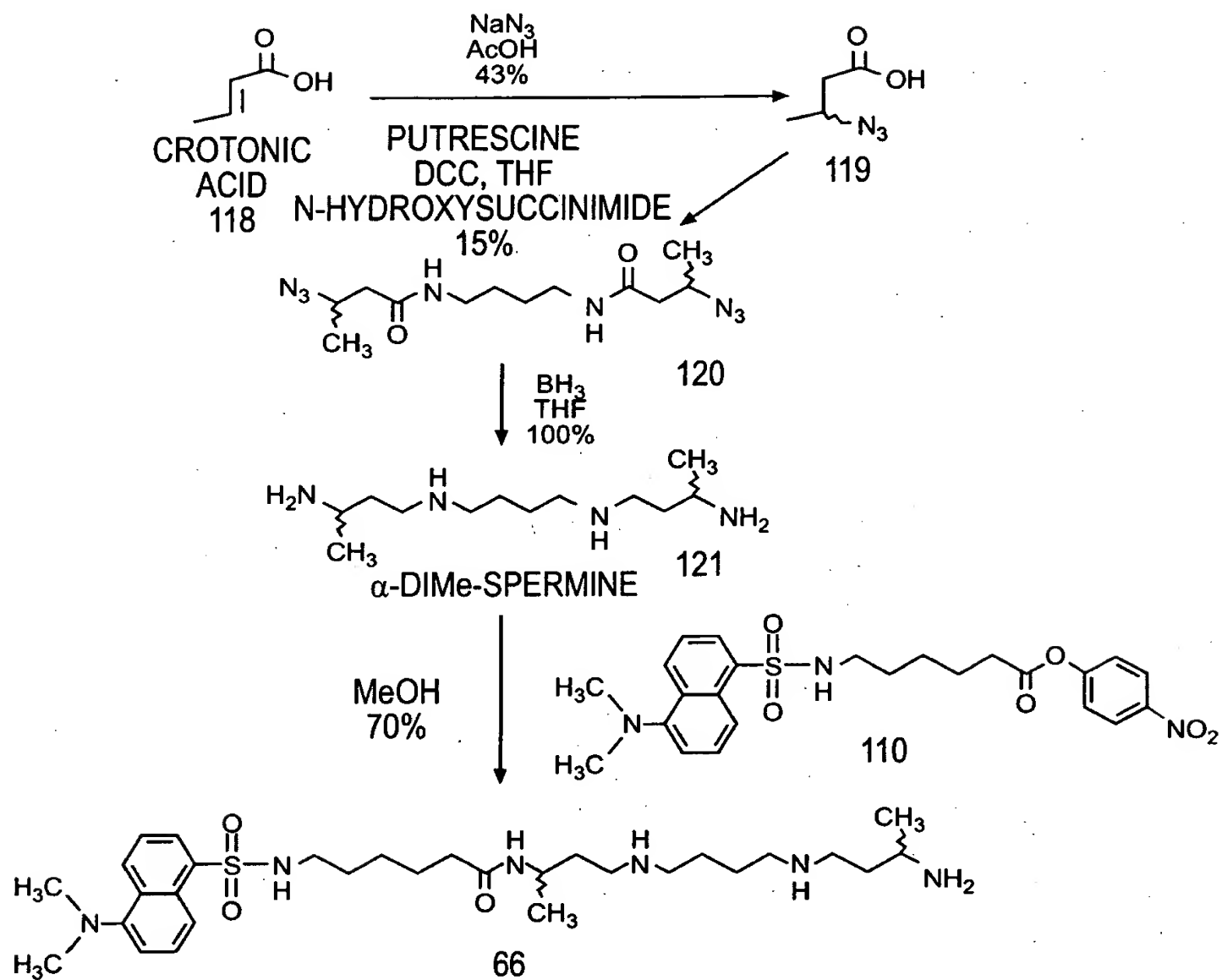
# REPLACEMENT SHEET



**FIG. 11b**

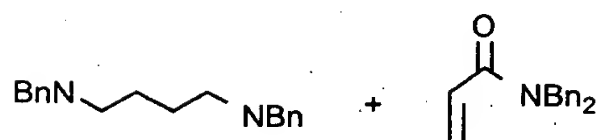
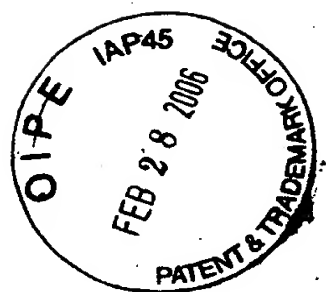


REPLACEMENT SHEET



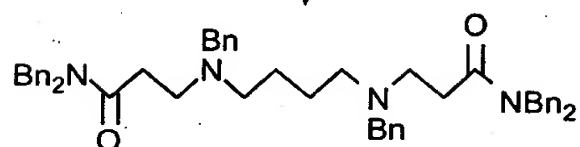
**FIG. 12**

# REPLACEMENT SHEET



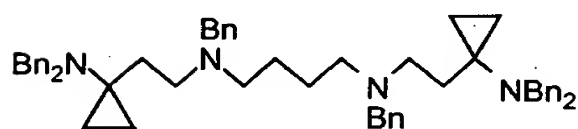
121

MeOH



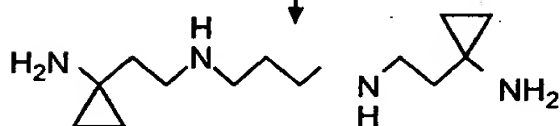
BMgG  
Ti(OPr)<sub>4</sub>  
THF

124



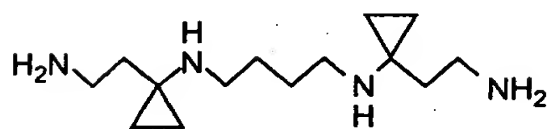
125

Pd/C  
H<sub>4</sub>EtCH



126a

OTHER ANALOGS:



126b



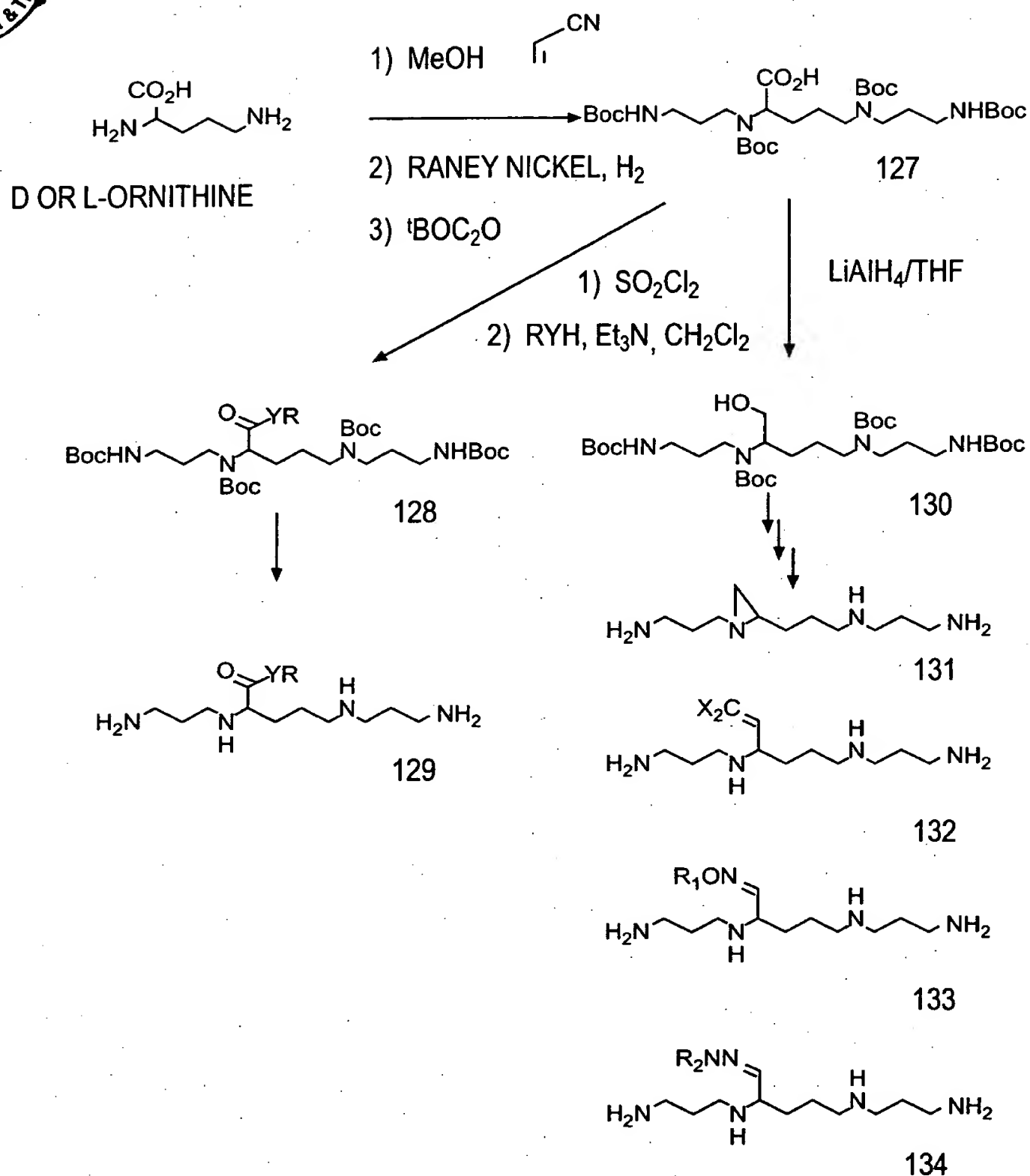
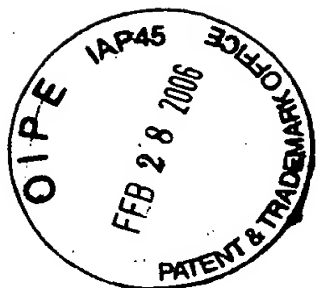
126c



126d

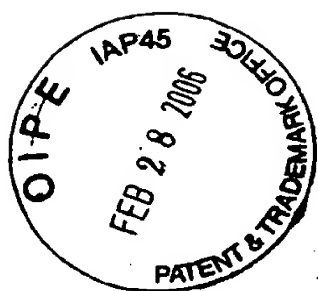
**FIG. 13**

# REPLACEMENT SHEET

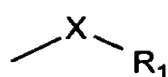


WHERE  $\text{Y}=\text{O}$ ,  $\text{S}$  OR  $\text{NH}$ ;  
 $\text{R}$ = VARIOUS GROUPS INCLUDING: PROPYLAZIRIDINE, PROPYLAMINE  
 HEXYLDANSYLSULFONAMIDE  
 $\text{R}_1=\text{H}$ ,  $\text{CH}_3(\text{CH}_2)_n$ , WHERE  $n=1$  TO  $10$ ;  
 $\text{X}=\text{H}$  OR HALOGEN

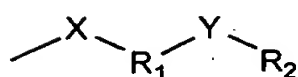
**FIG. 14**



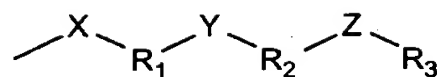
# REPLACEMENT SHEET



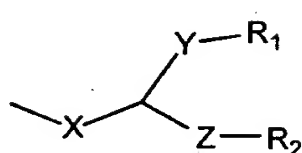
135



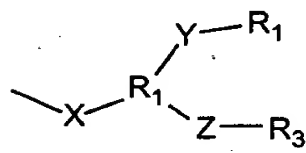
136



137



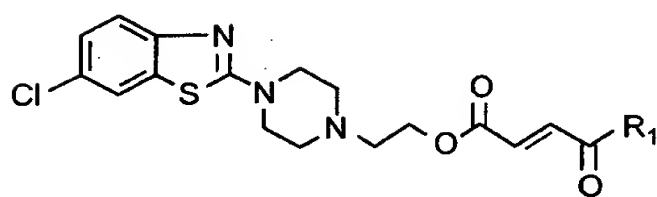
138



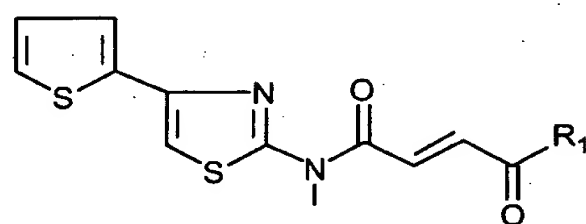
139

WHERE X= SPACER<sub>1</sub>, Y= SPACER<sub>2</sub>; AND Z= SPACER<sub>3</sub>; AND  
R<sub>1</sub>, R<sub>2</sub> AND R<sub>3</sub> CAN BE ALICYCLIC, AROMATIC, OR HETEROCYCLIC

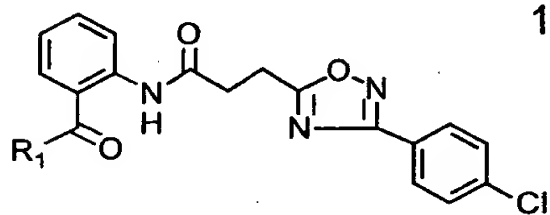
## FIG. 15



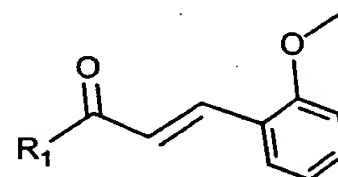
140



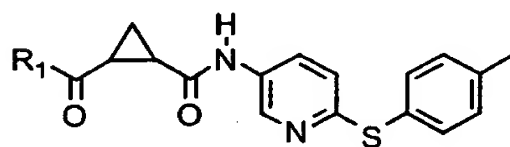
141



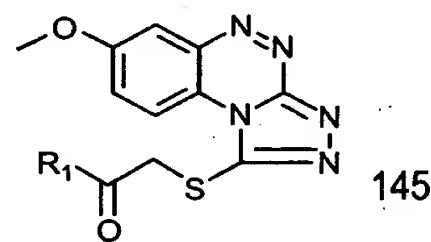
142



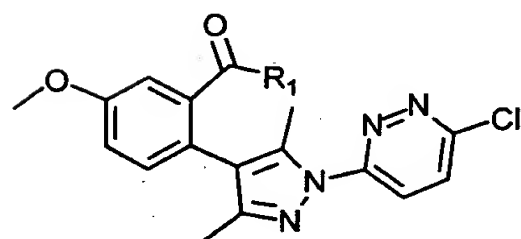
143



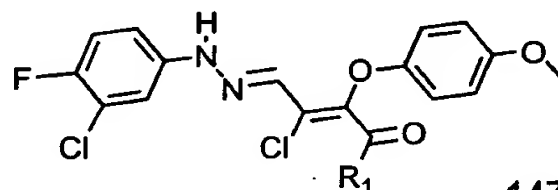
144



145



146



147

## FIG. 16

EFFECT OF "HEADLESS" COMPOUNDS ON THE GROWTH OF MDA-MB-231  
CELLS WITH ODC INHIBITORS

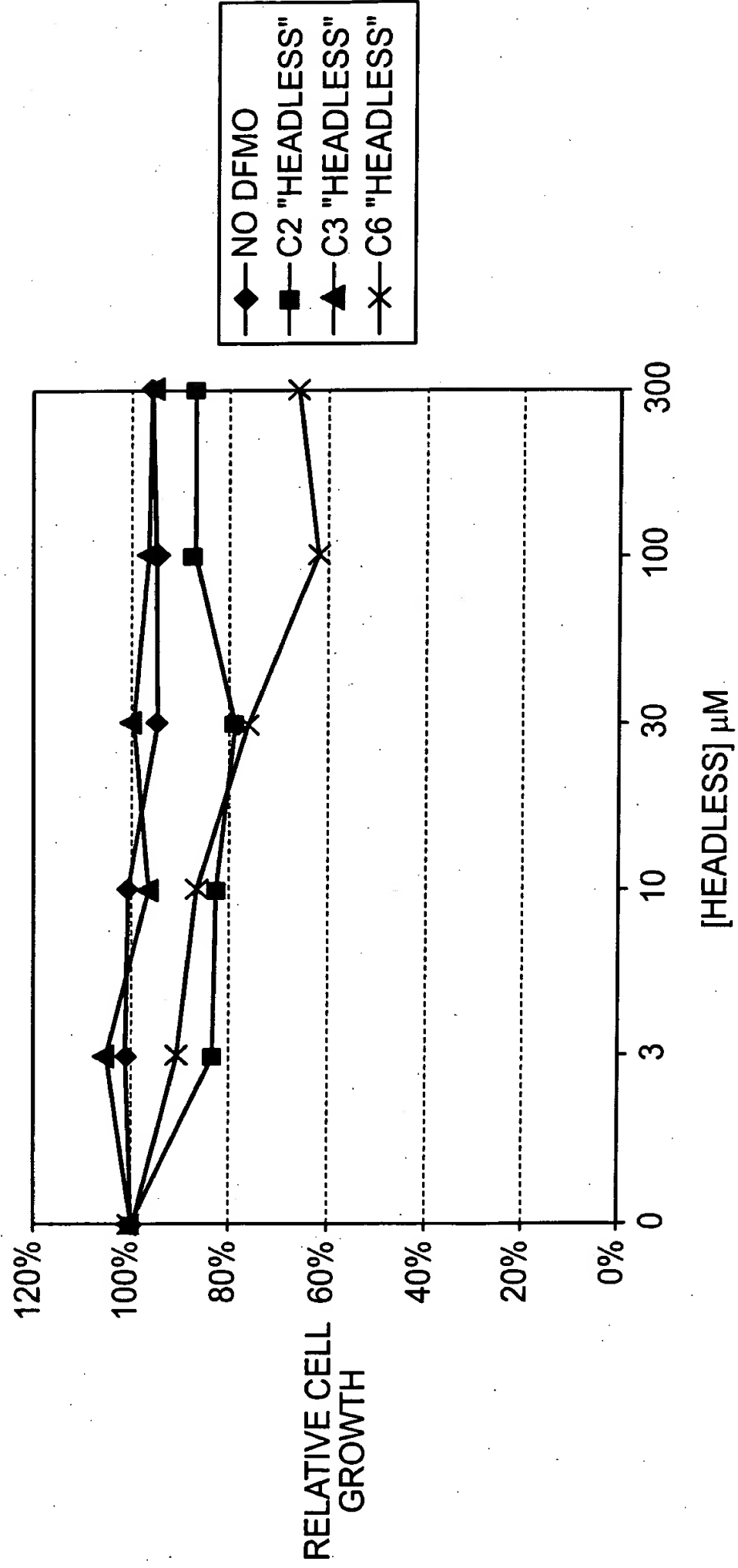
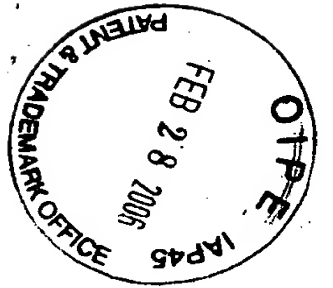


FIG. 17



EFFECT OF "HEADLESS" COMPOUNDS ON THE GROWTH OF PC3  
CELLS WITH ODC INHIBITORS

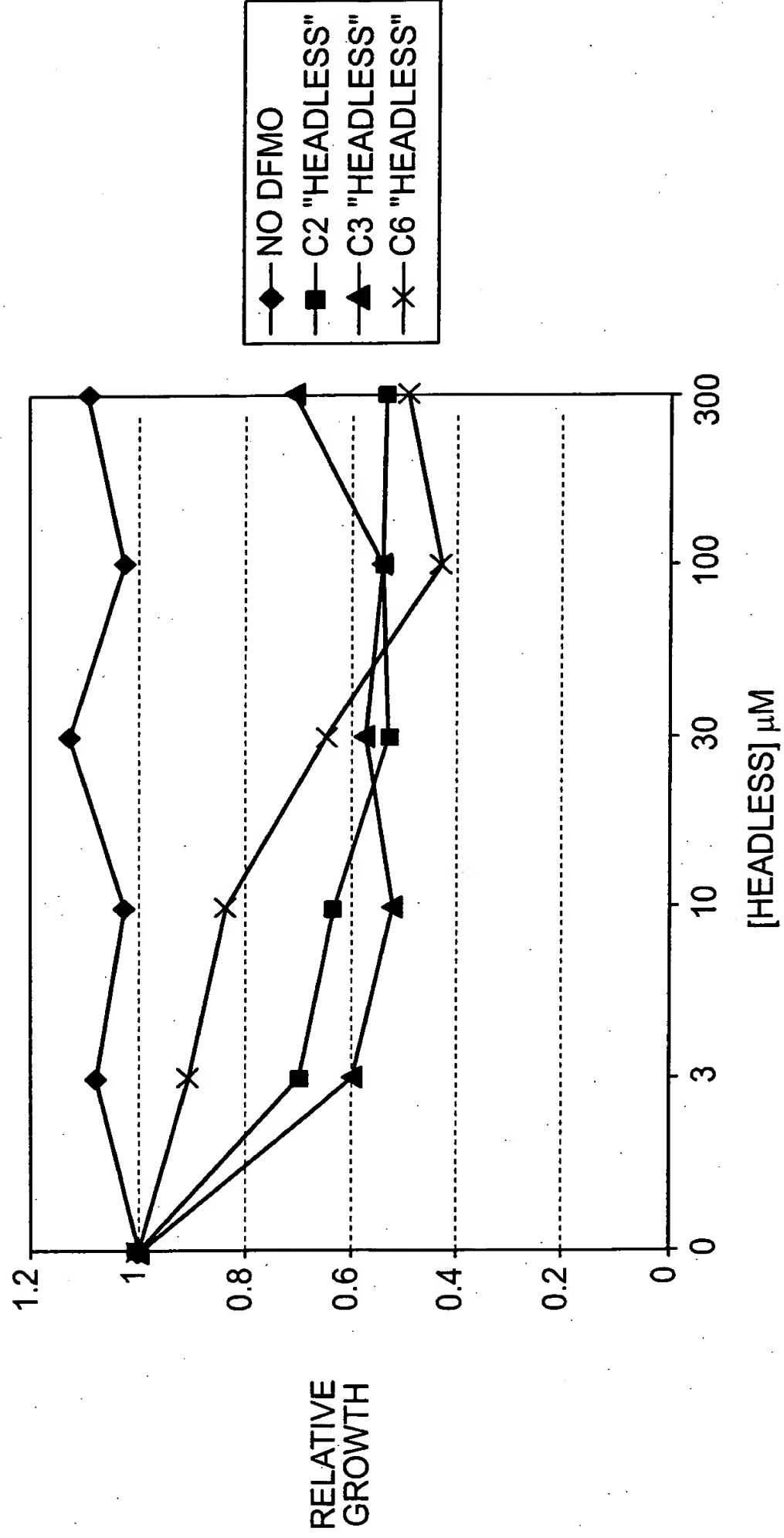
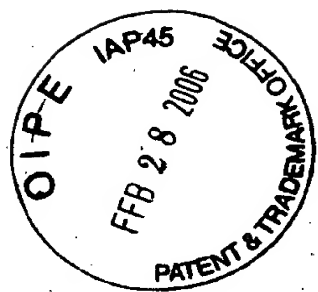


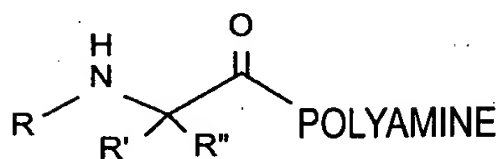
FIG. 18




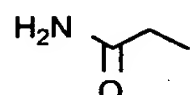
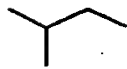
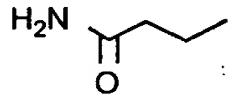
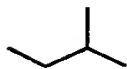
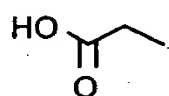
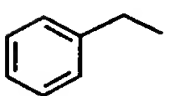
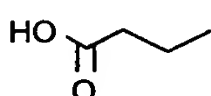
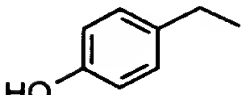

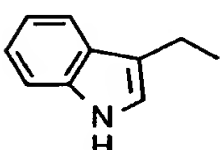


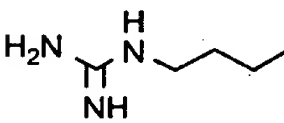

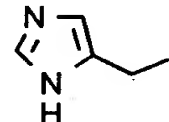
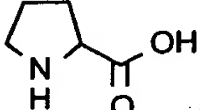




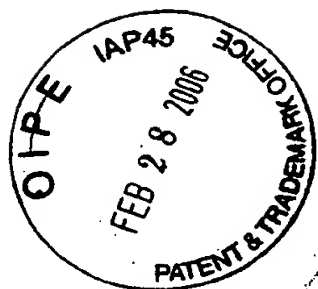
# REPLACEMENT SHEET



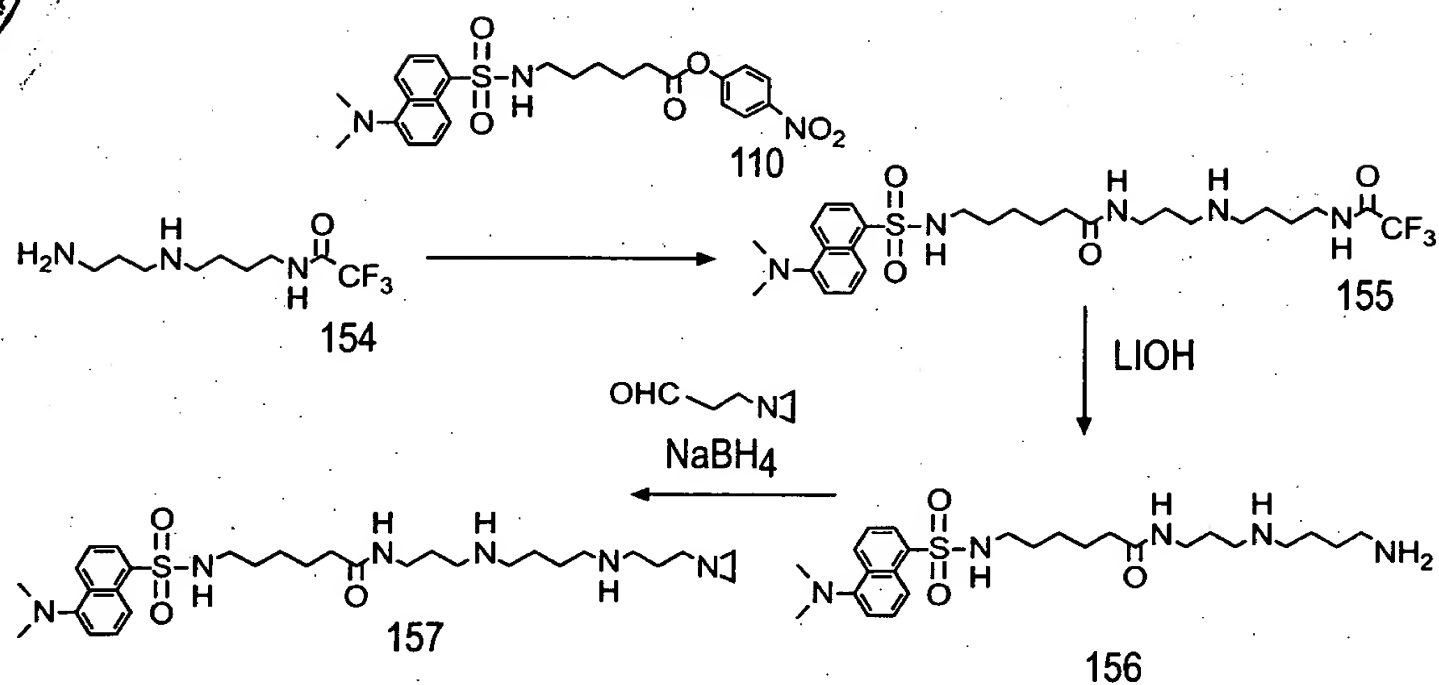
STEREOCHEMISTRY:  
L IS S, D IS R

<u>R'</u>		<u>R'</u>	
-H	Gly	HS-CH <sub>2</sub> -CH <sub>2</sub> -	Cys
-CH <sub>3</sub>	Ala	-S-CH <sub>2</sub> -CH <sub>2</sub> -CH <sub>2</sub> -	Met
	Val		Asn
	Leu		Gln
	Ile		Asp
	Phe		Glu
	Tyr		Lys
	Trp		Om
	Ser		Arg
	Thr		His
			Pro

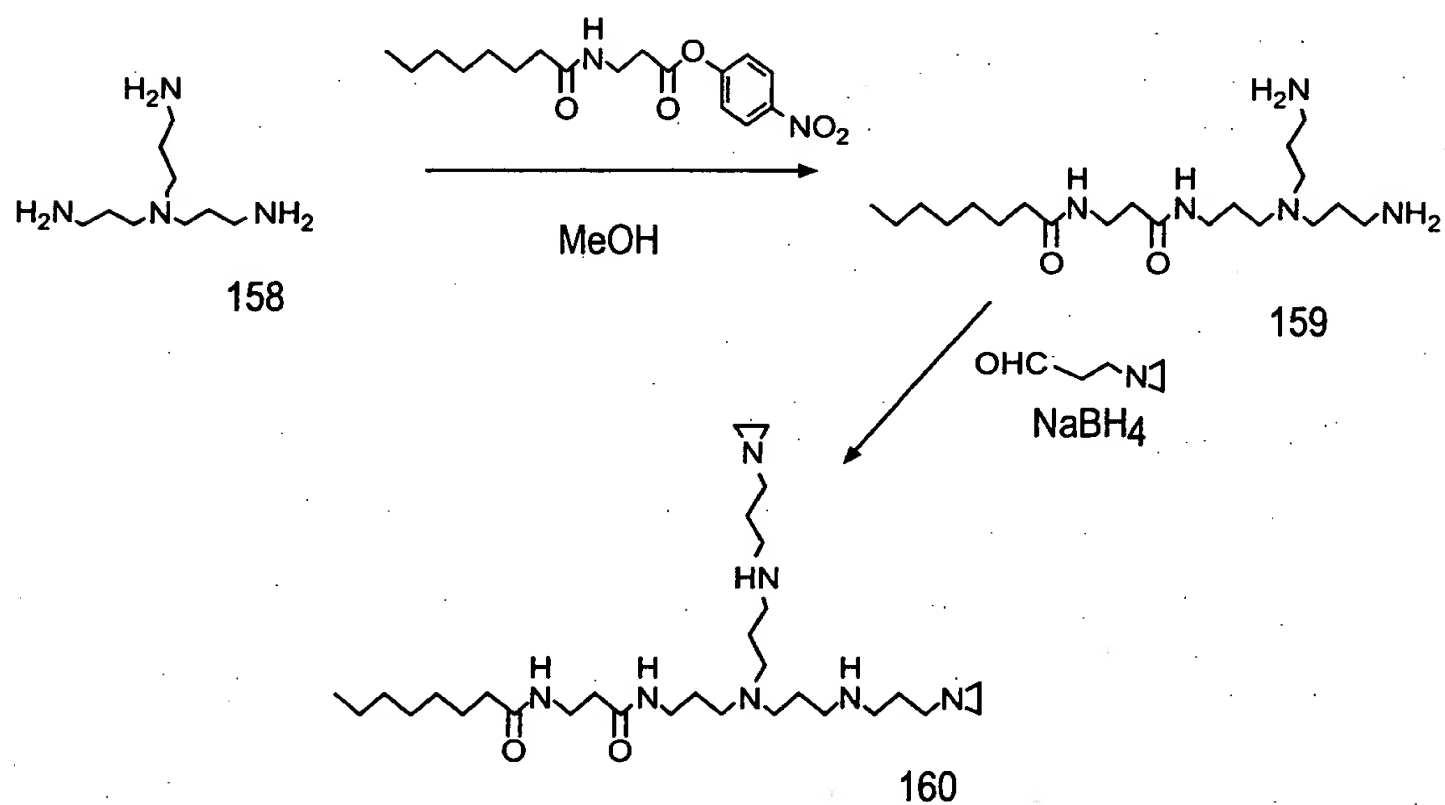
**FIG. 19**



REPLACEMENT SHEET



**FIG. 20**



**FIG. 21**

DACS WITH ODC INHIBITOR ENHANCES THE GROWTH-  
INHIBITION OF MDA-MB-231 BREAST CARCINOMA CELLS

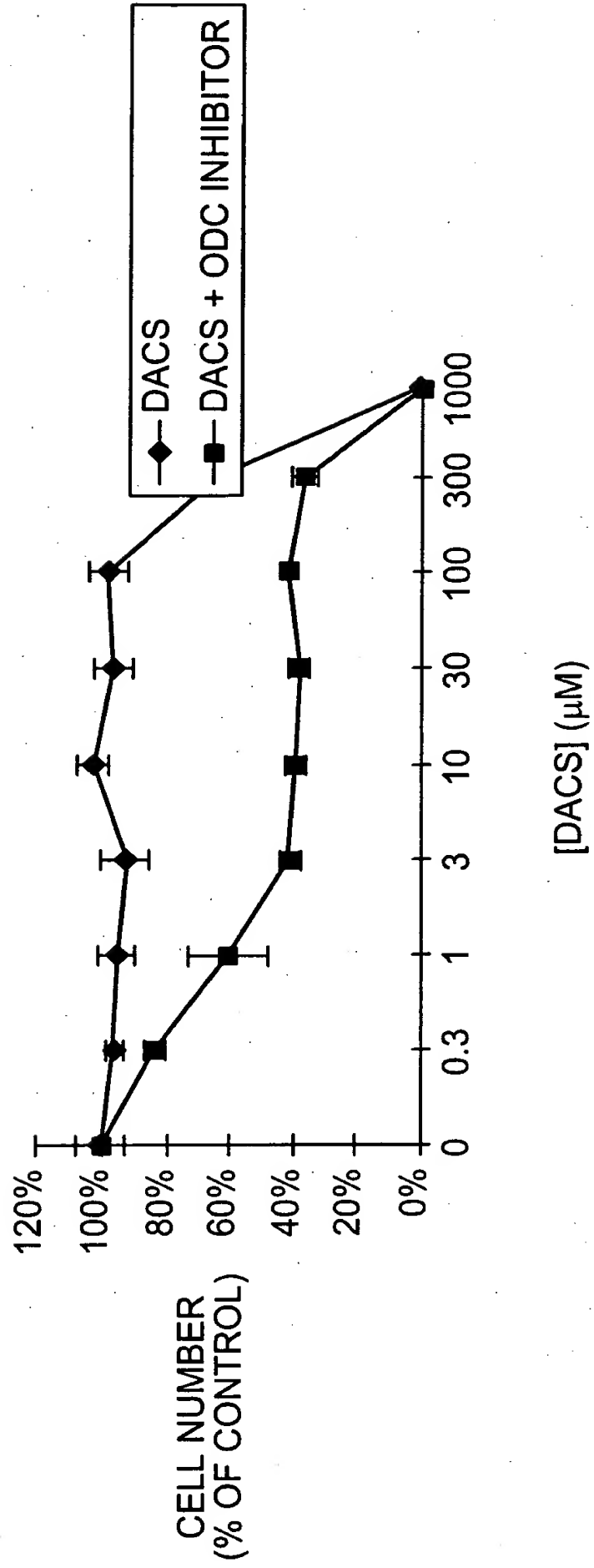
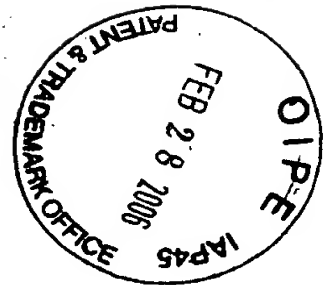
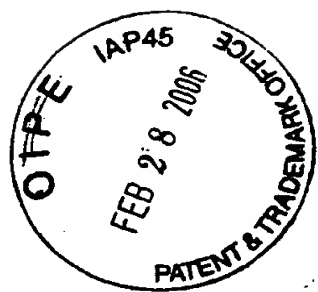


FIG. 22

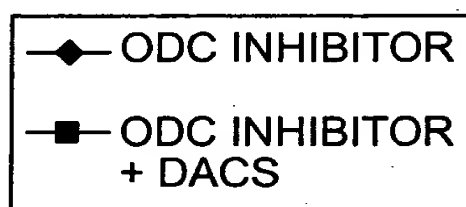
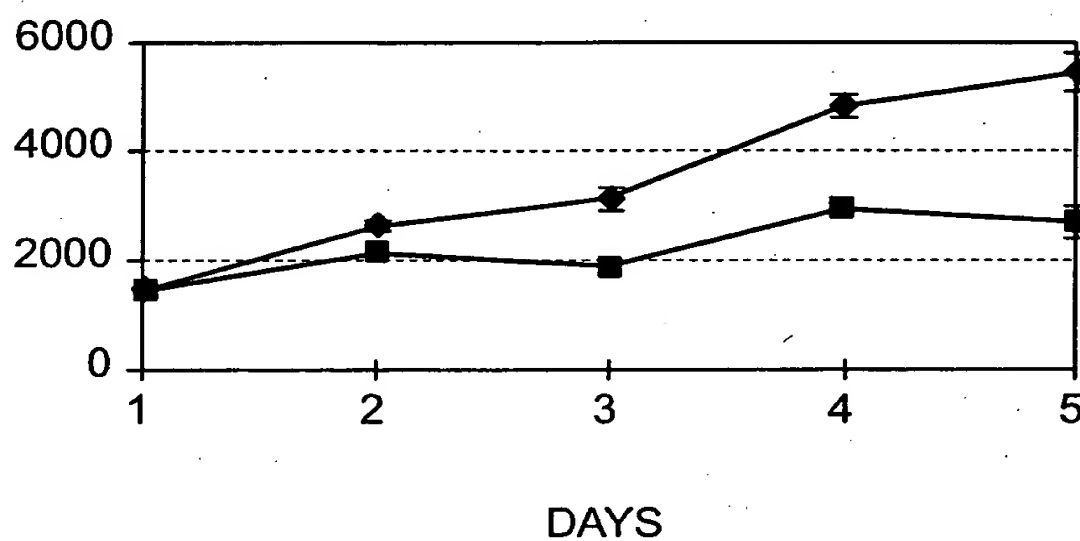




# REPLACEMENT SHEET

## DACS INHIBITS GROWTH IN THE PRESENCE OF 1.0 $\mu$ M SPERMIDINE

CELL NUMBER



**FIG. 23**

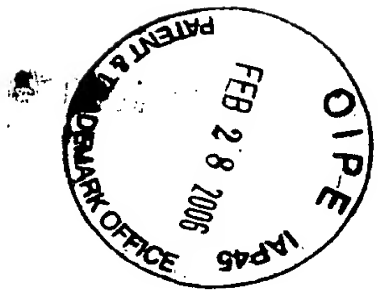
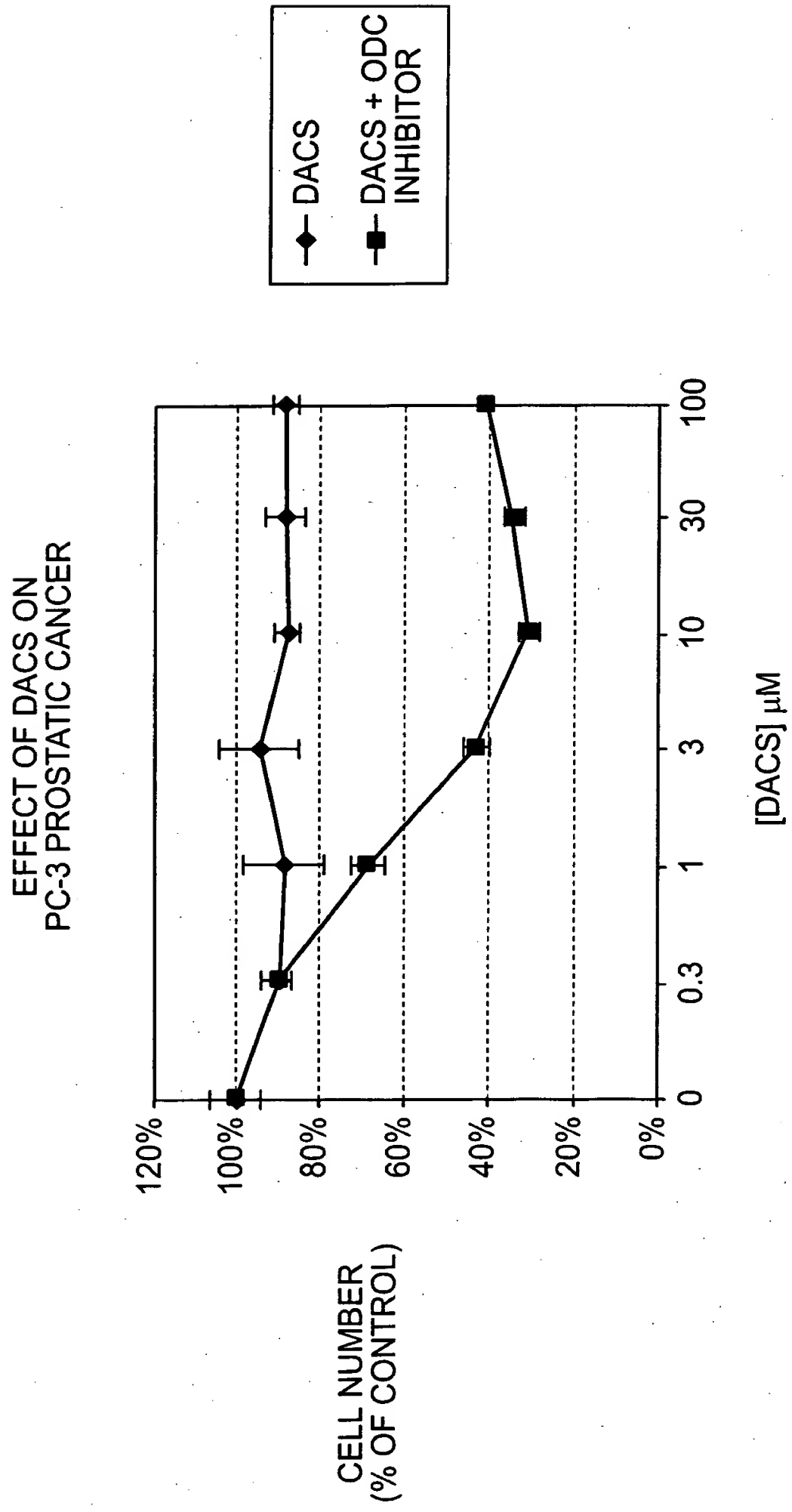
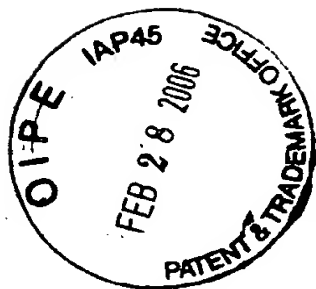
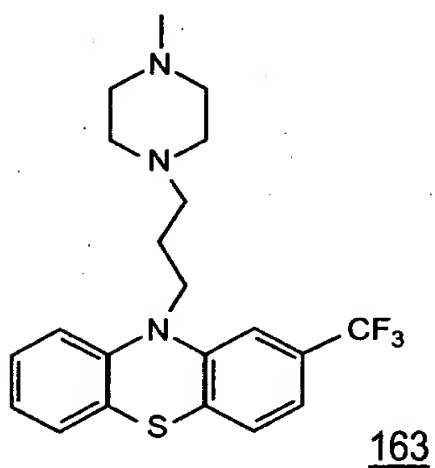
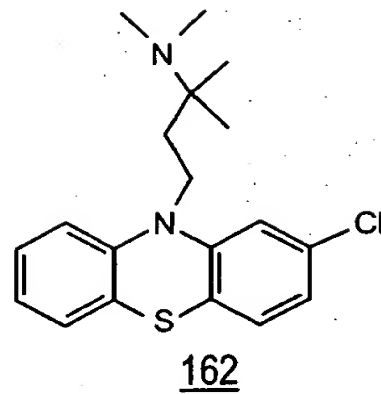
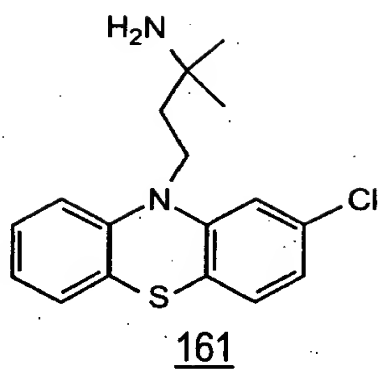


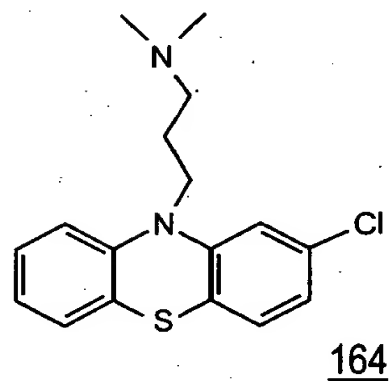
FIG. 24



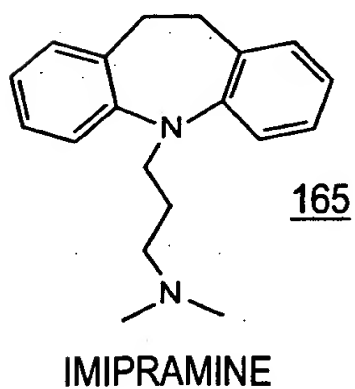
REPLACEMENT SHEET



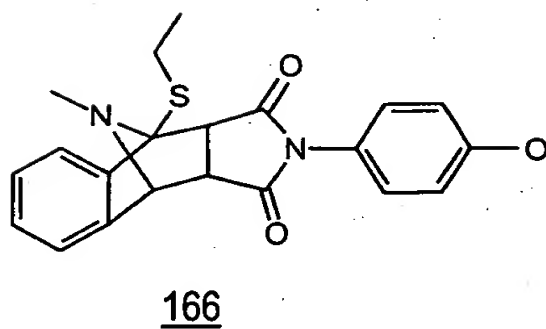
TRIFLUOPERAZINE



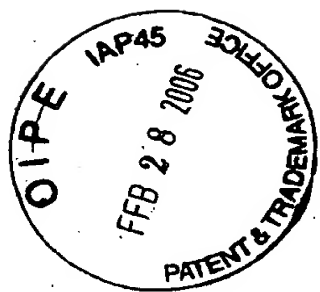
THORAZINE



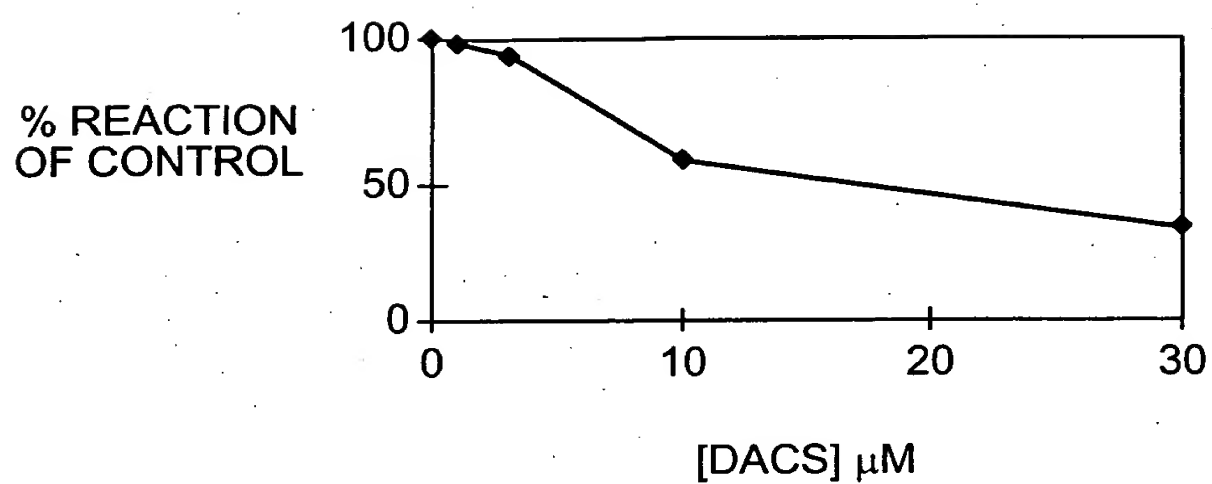
IMIPRAMINE



**FIG. 25**

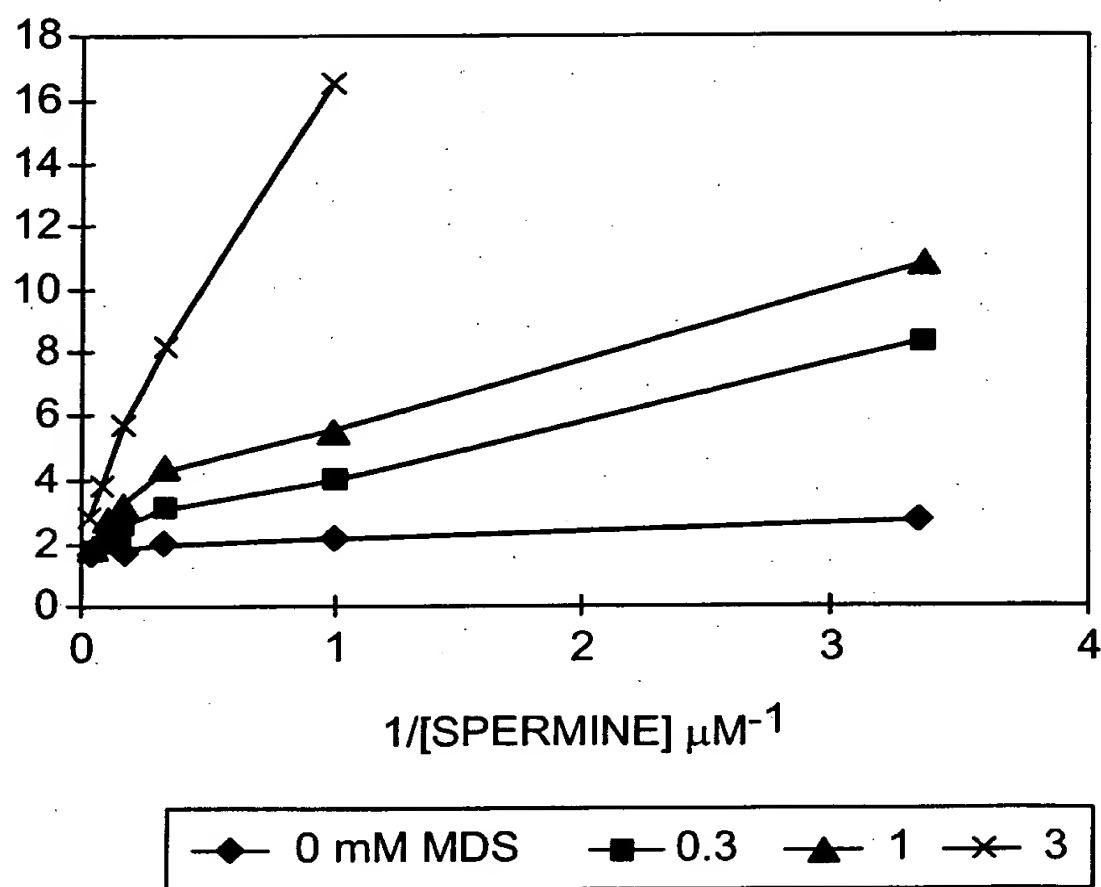


REPLACEMENT SHEET



**FIG. 26**

1/RATE (PMOLES  $^3\text{H}$   
SPERMIDINE/MIN) $^{-1}$



**FIG. 27**

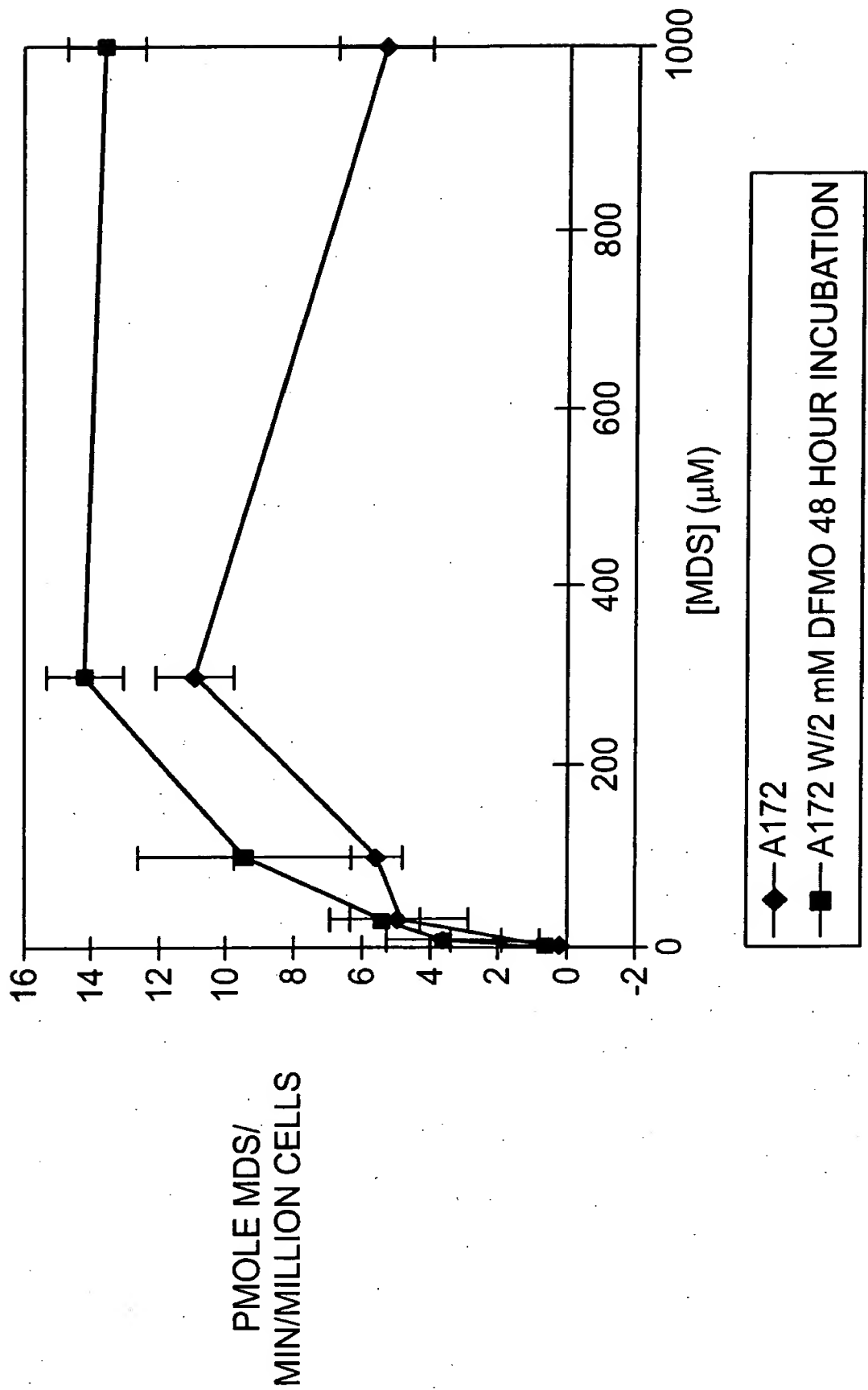
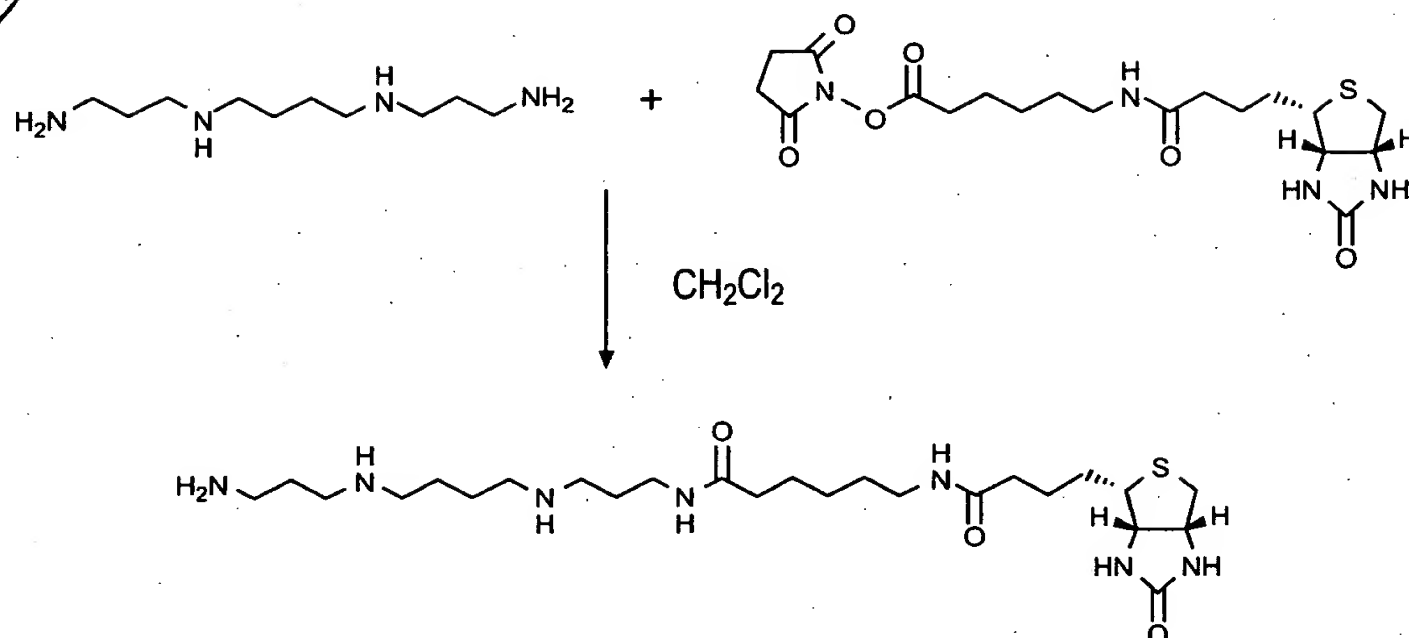
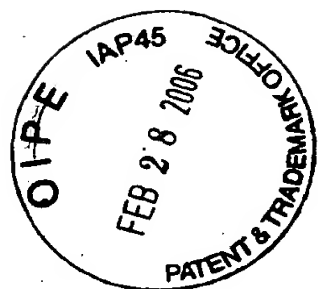


FIG. 28

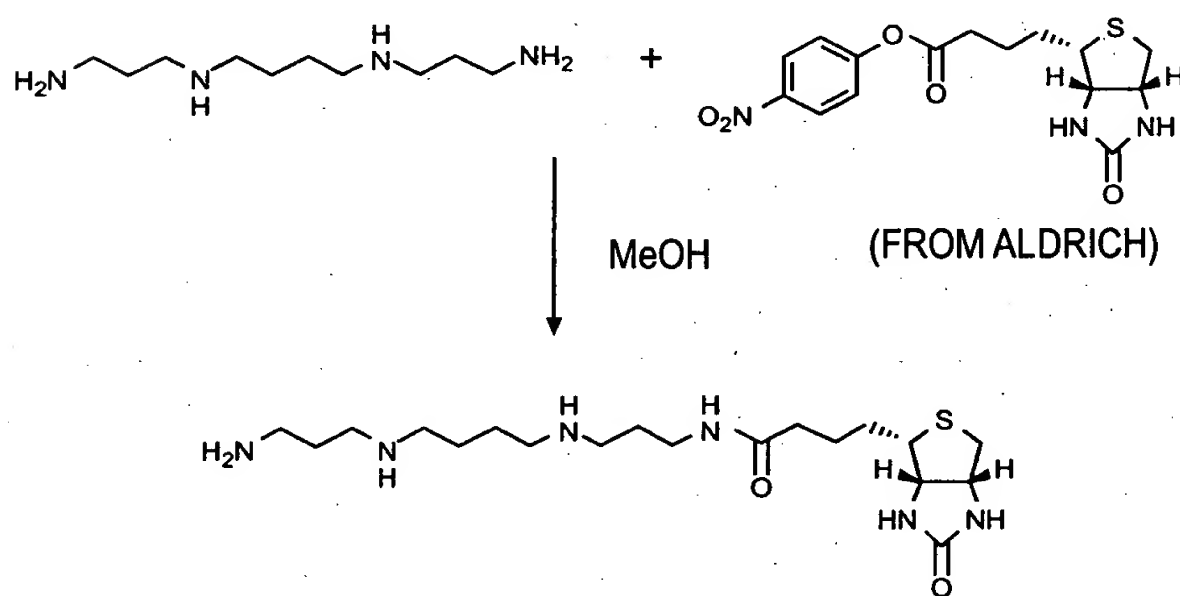




# REPLACEMENT SHEET

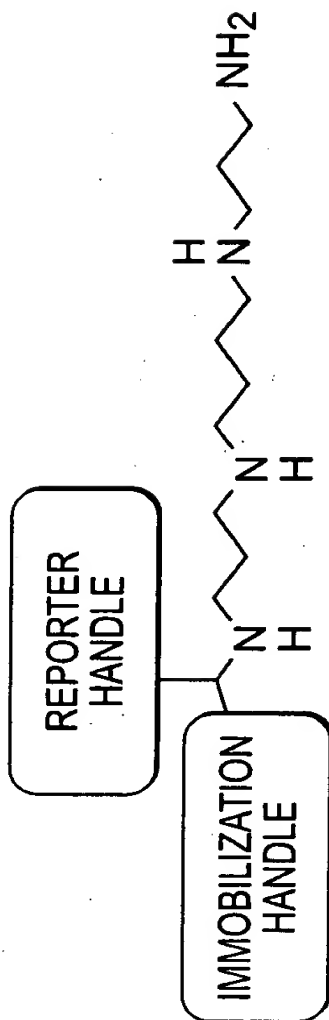


**FIG. 29**

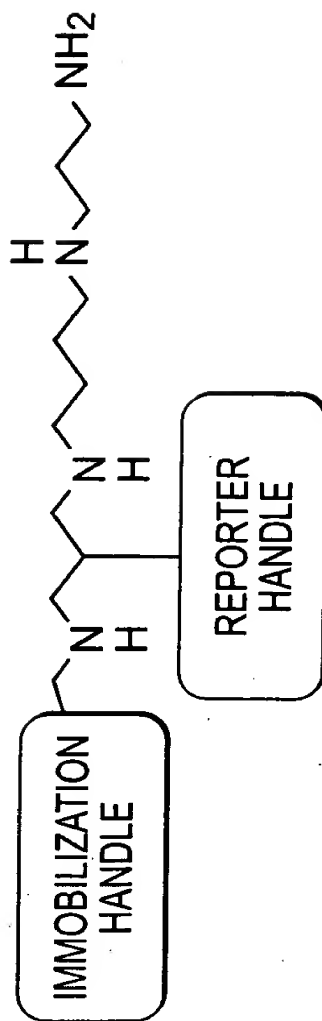


**FIG. 30**

A. REPORTER AND IMMOBILIZATION HANDLES ARE BOTH N<sup>1</sup>-TERMINAL



B. REPORTER HANDLE IS INTERNAL AND IMMOBILIZATION HANDLE IS N-TERMINAL



C. IMMOBILIZATION AND REPORTER HANDLES ARE BOTH N<sup>1</sup>- N<sup>12</sup> TERMINAL, RESPECTIVELY

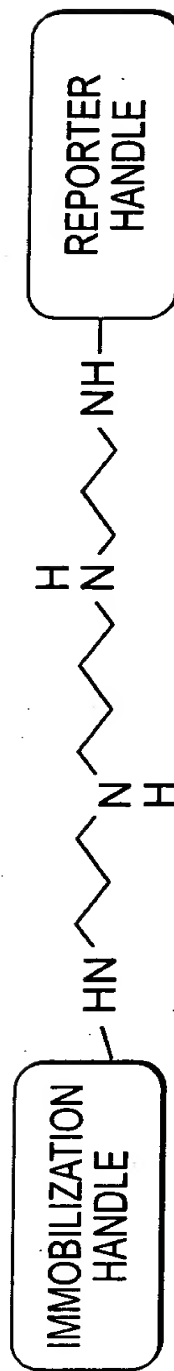


FIG. 31



DETECTION OF MDS AND DACS

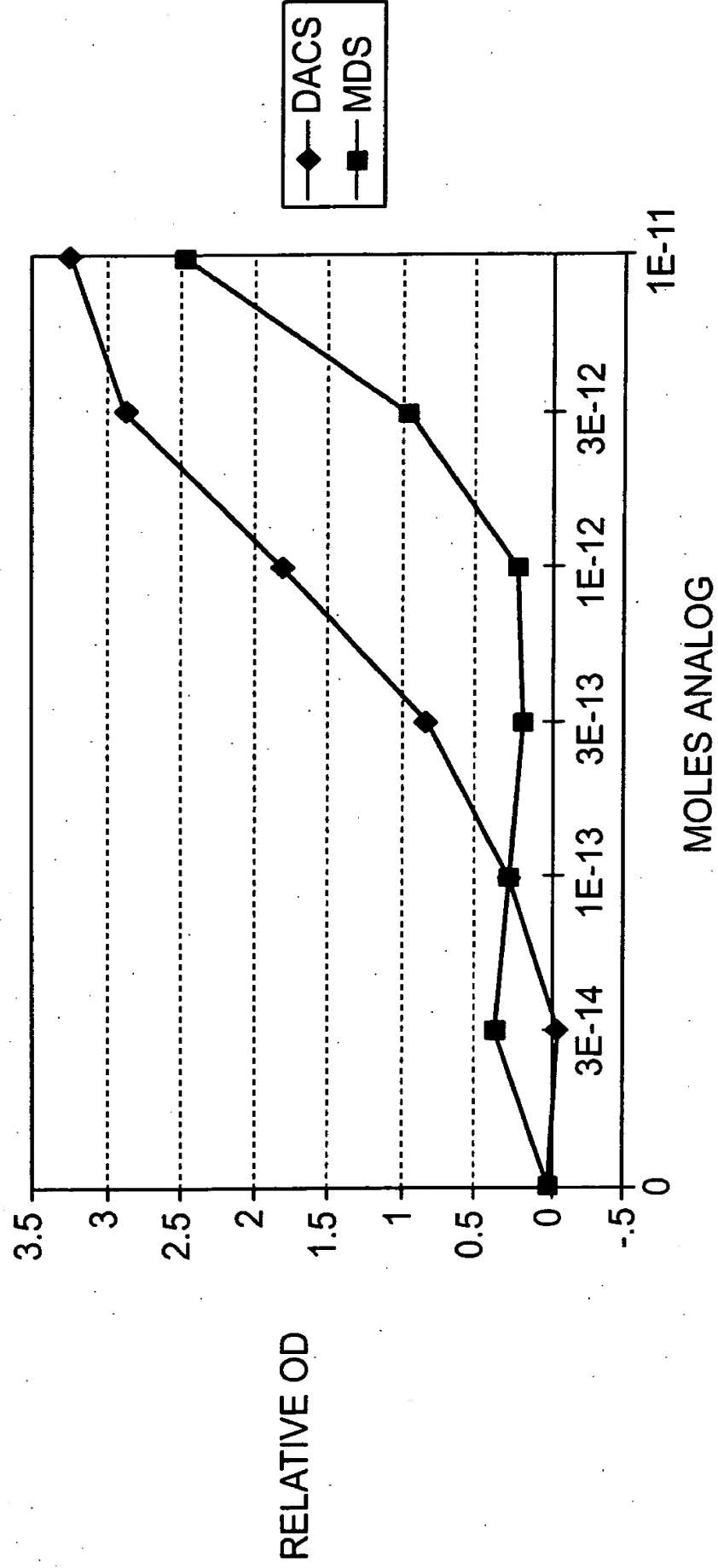
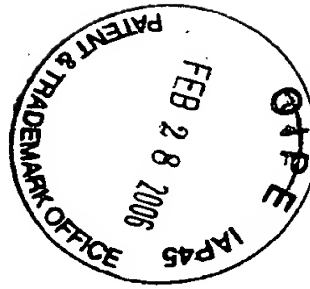
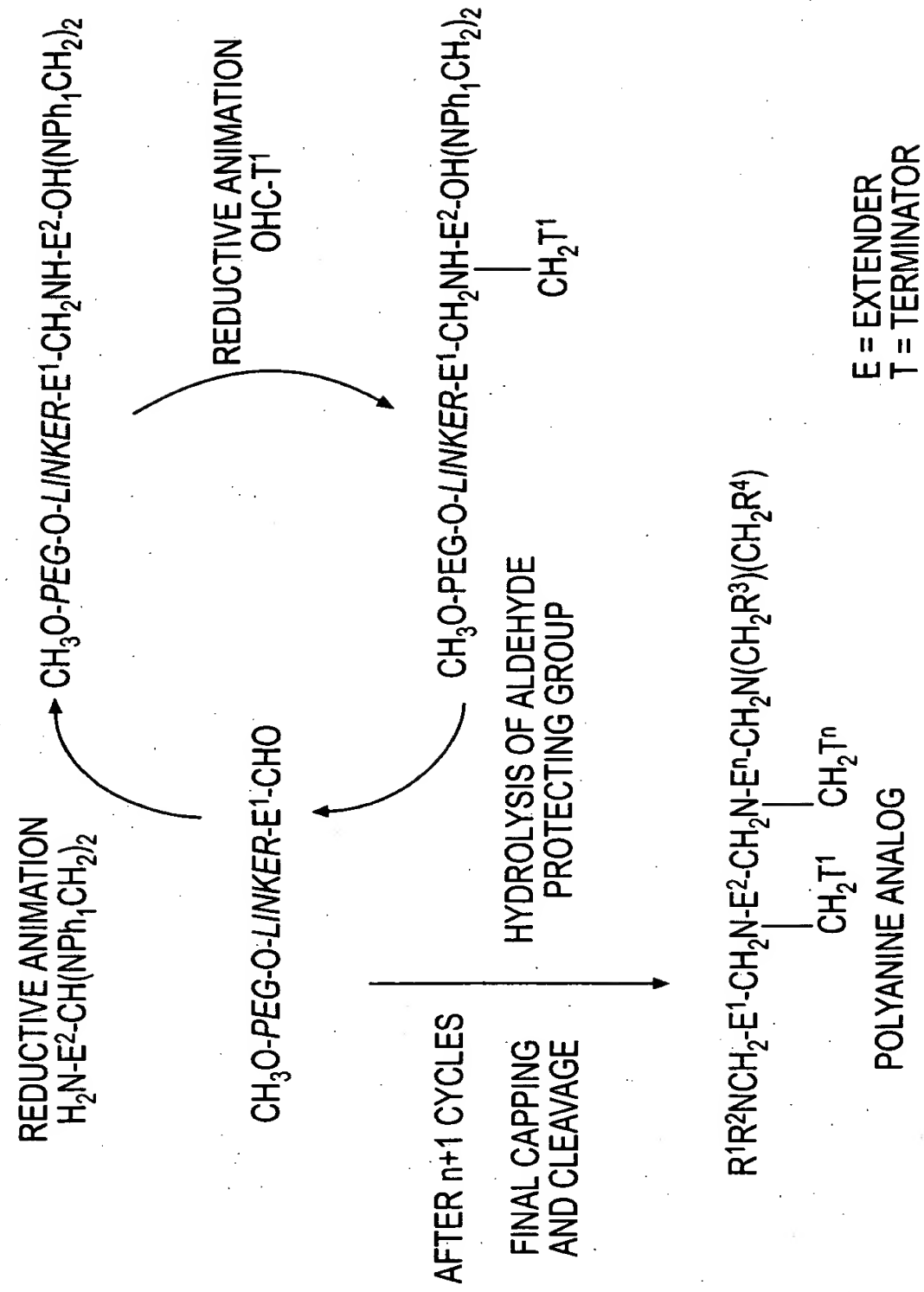


FIG. 32



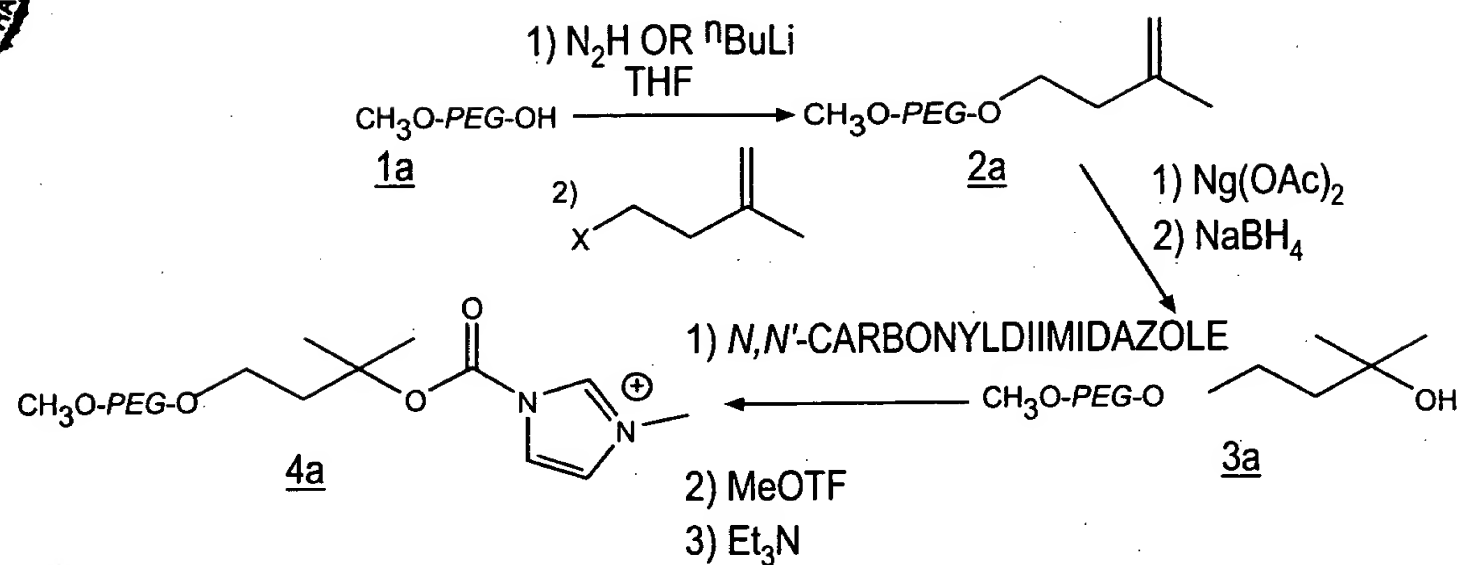
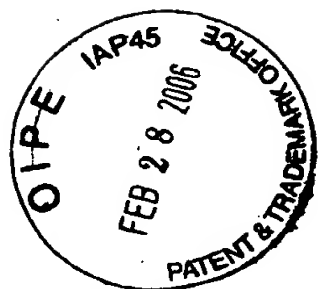
GENERAL SCHEME



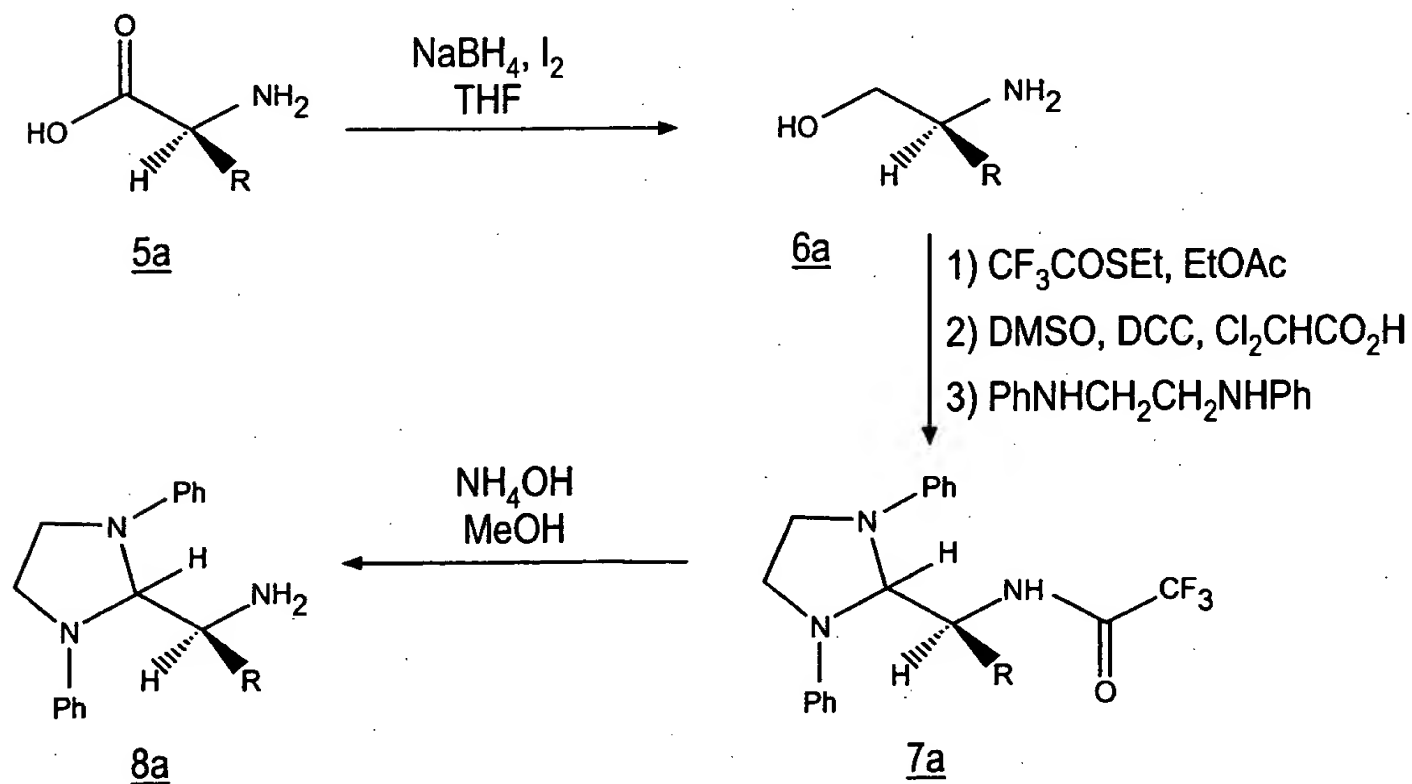
**FIG. 33**



REPLACEMENT SHEET



**FIG. 34**



**FIG. 35**

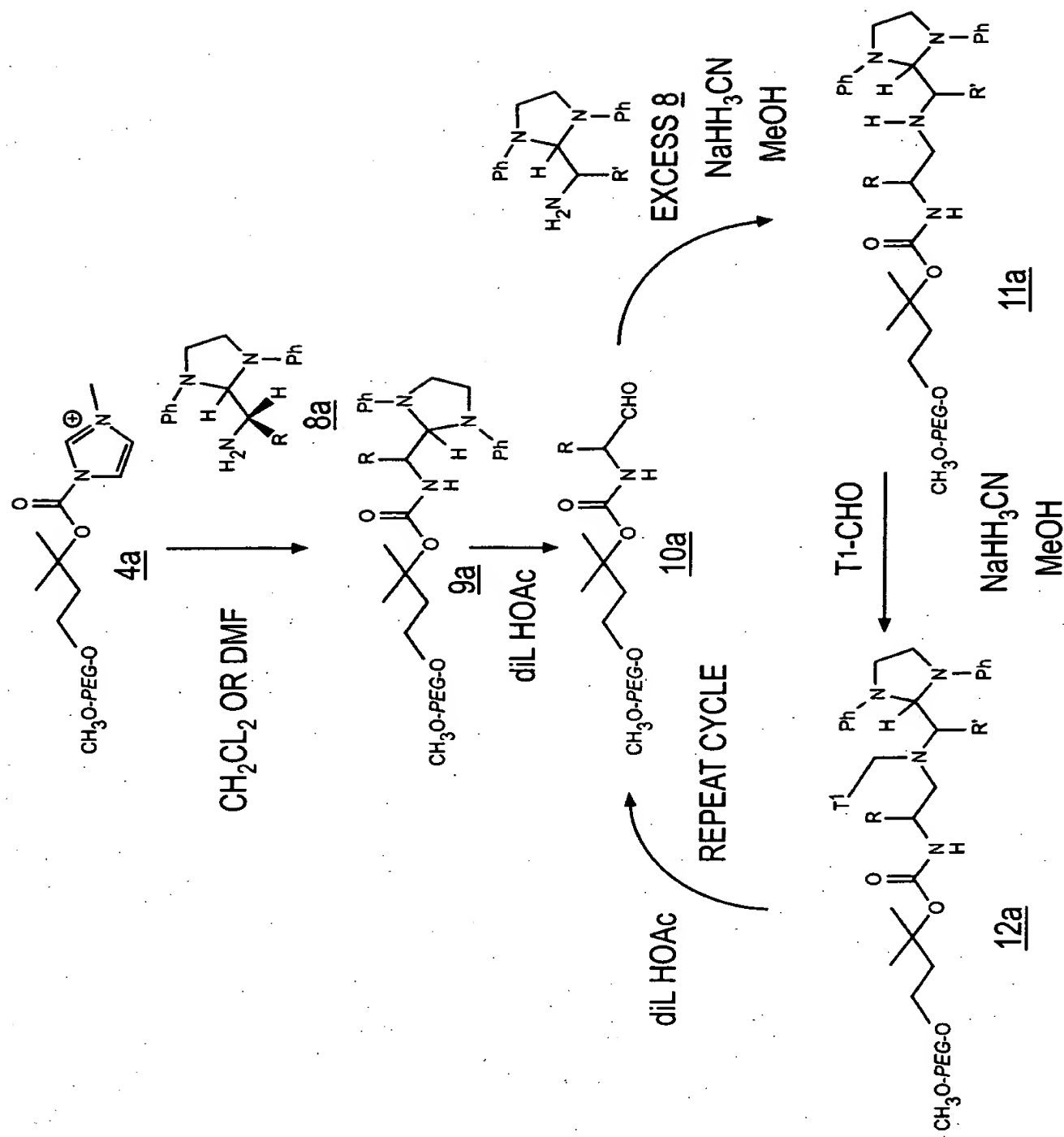
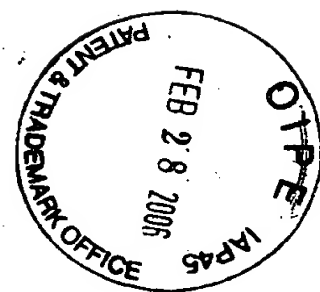
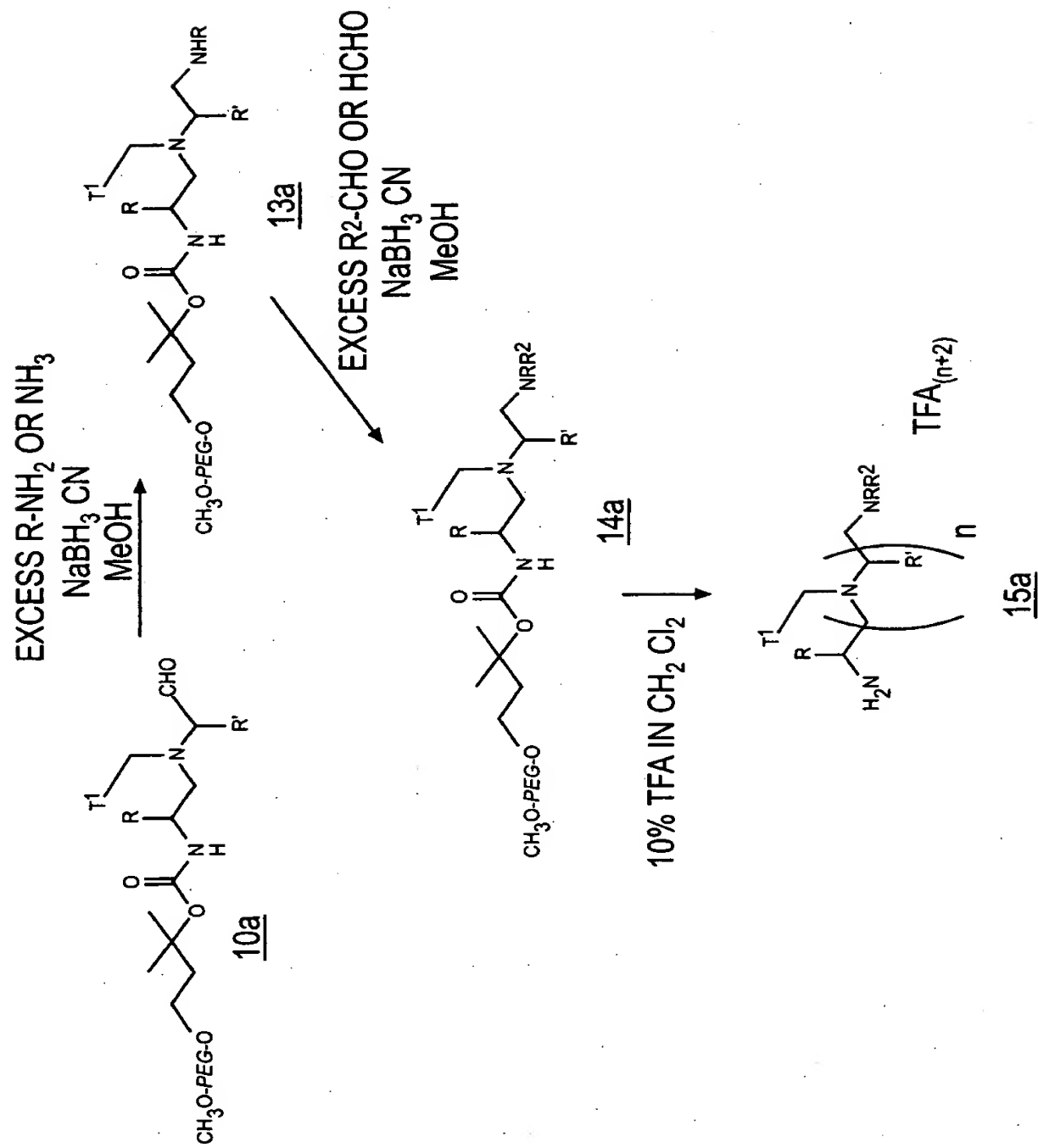
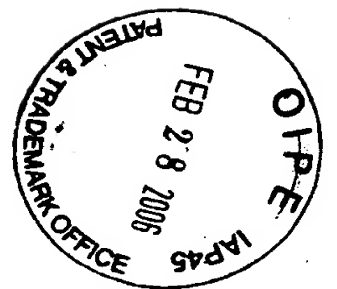


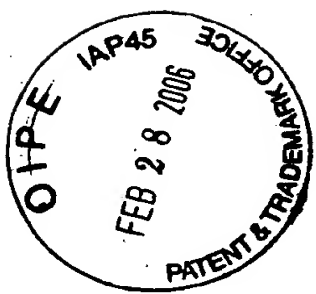
FIG. 36



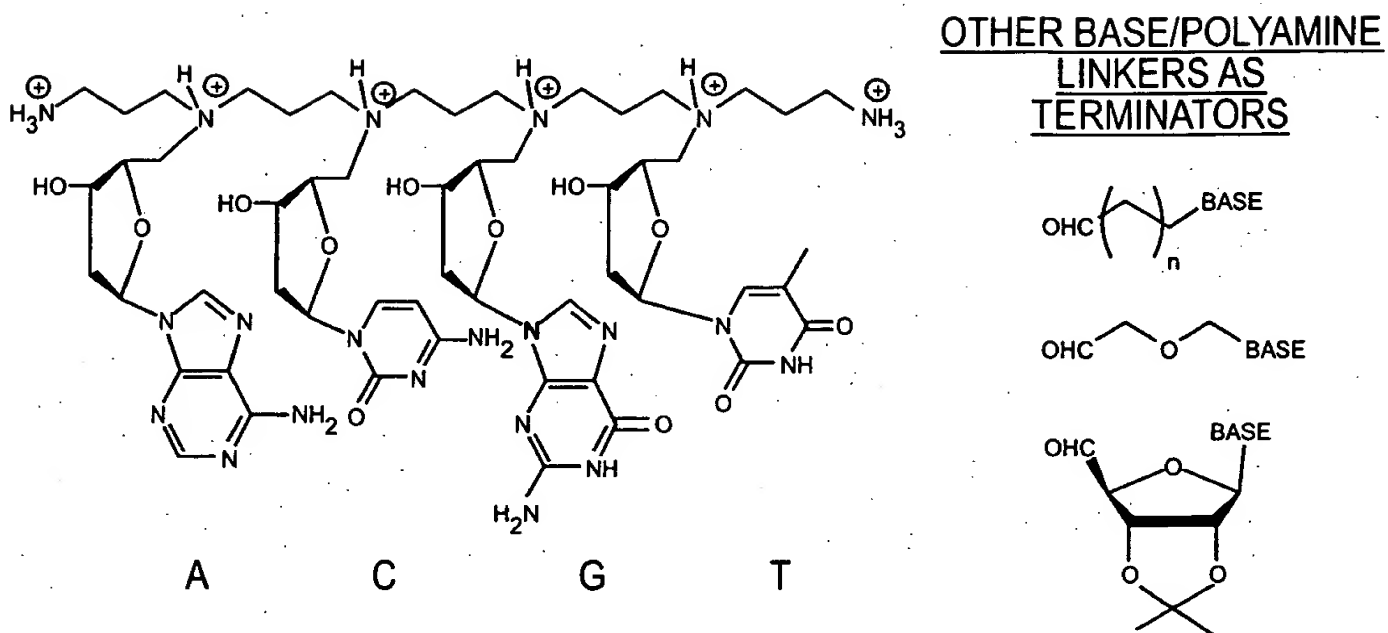
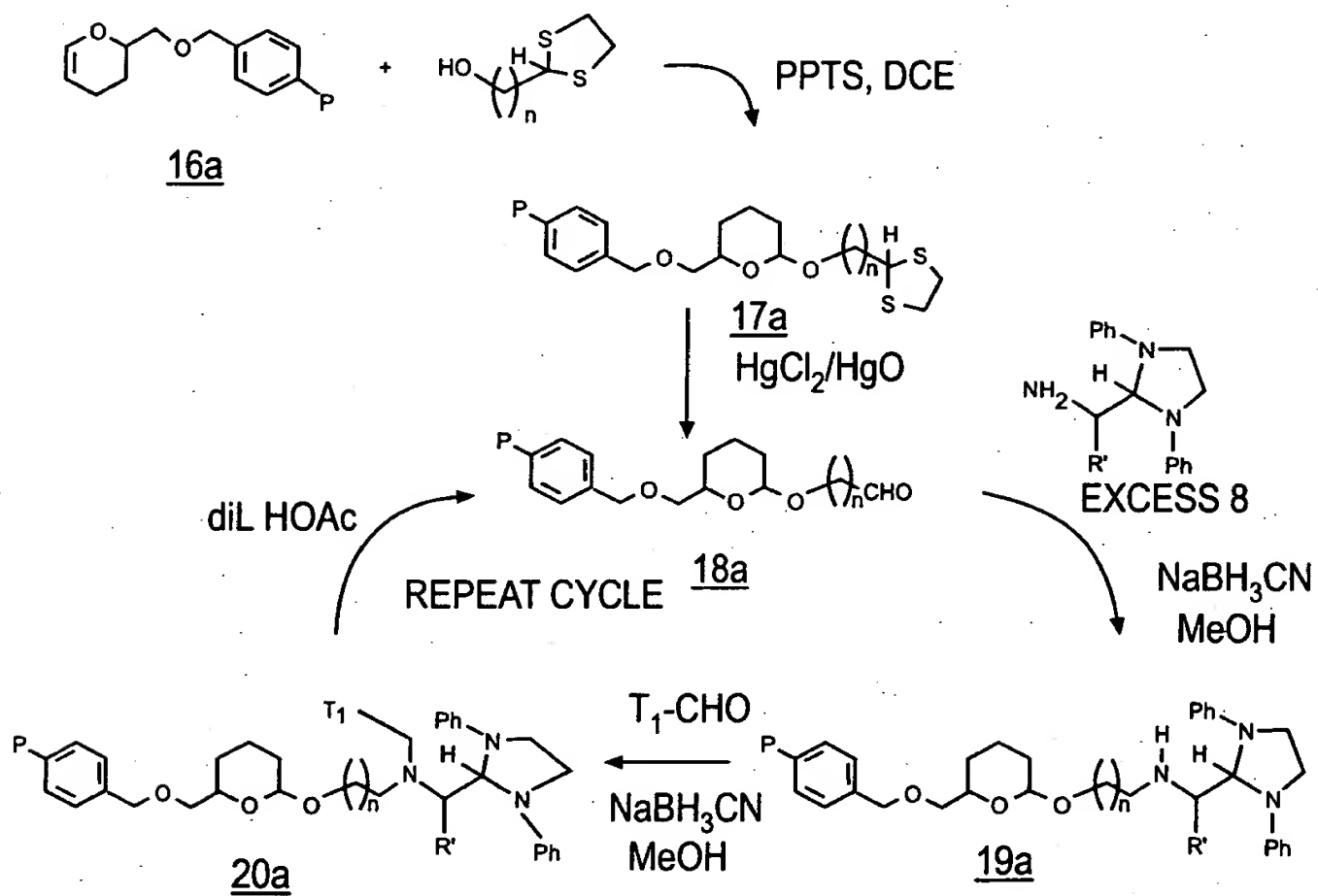


**FIG. 37**



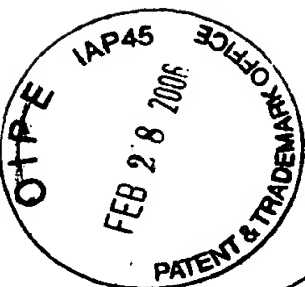


## REPLACEMENT SHEET

**FIG. 38****FIG. 39**



## REPLACEMENT SHEET



REPLACEMENT SHEET

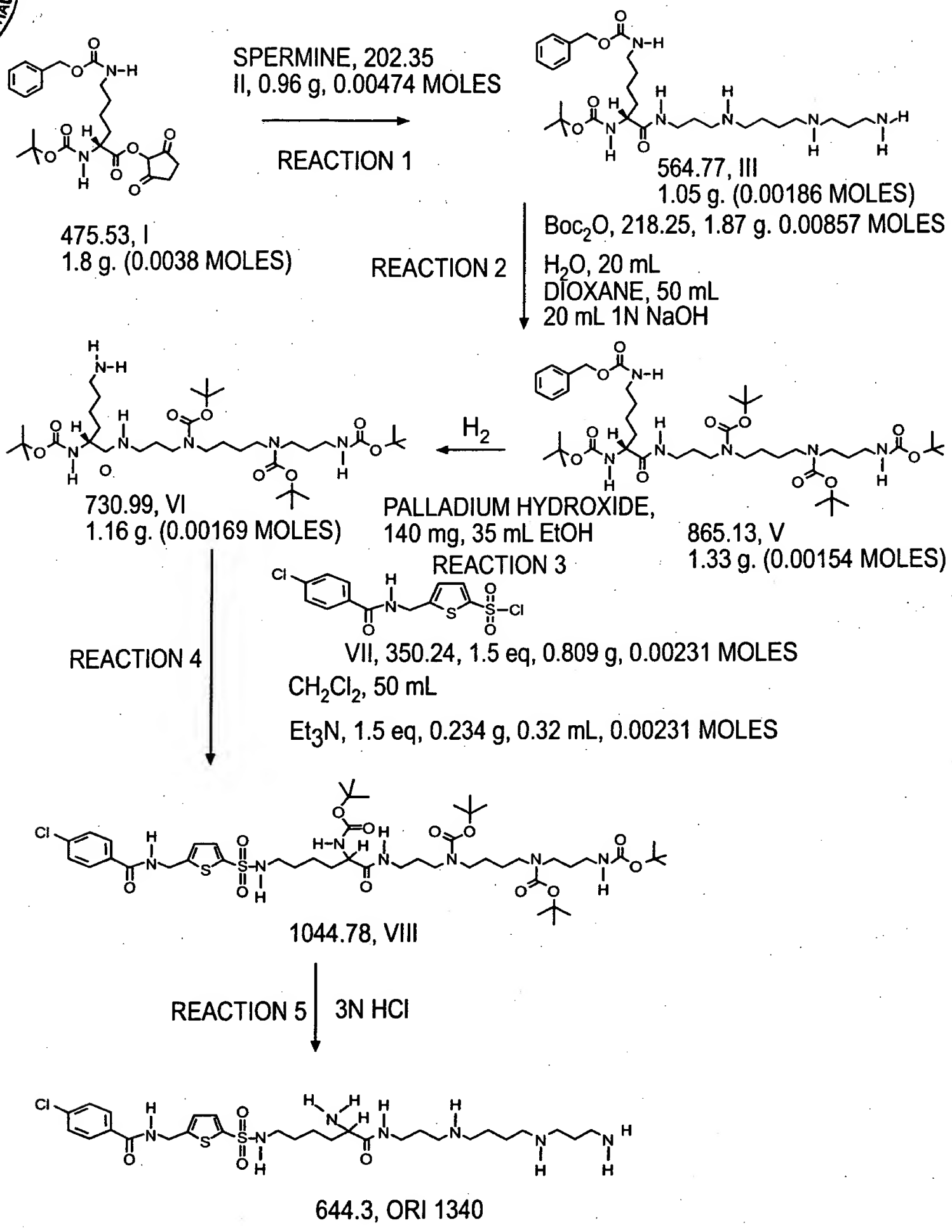
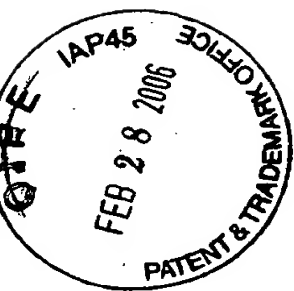
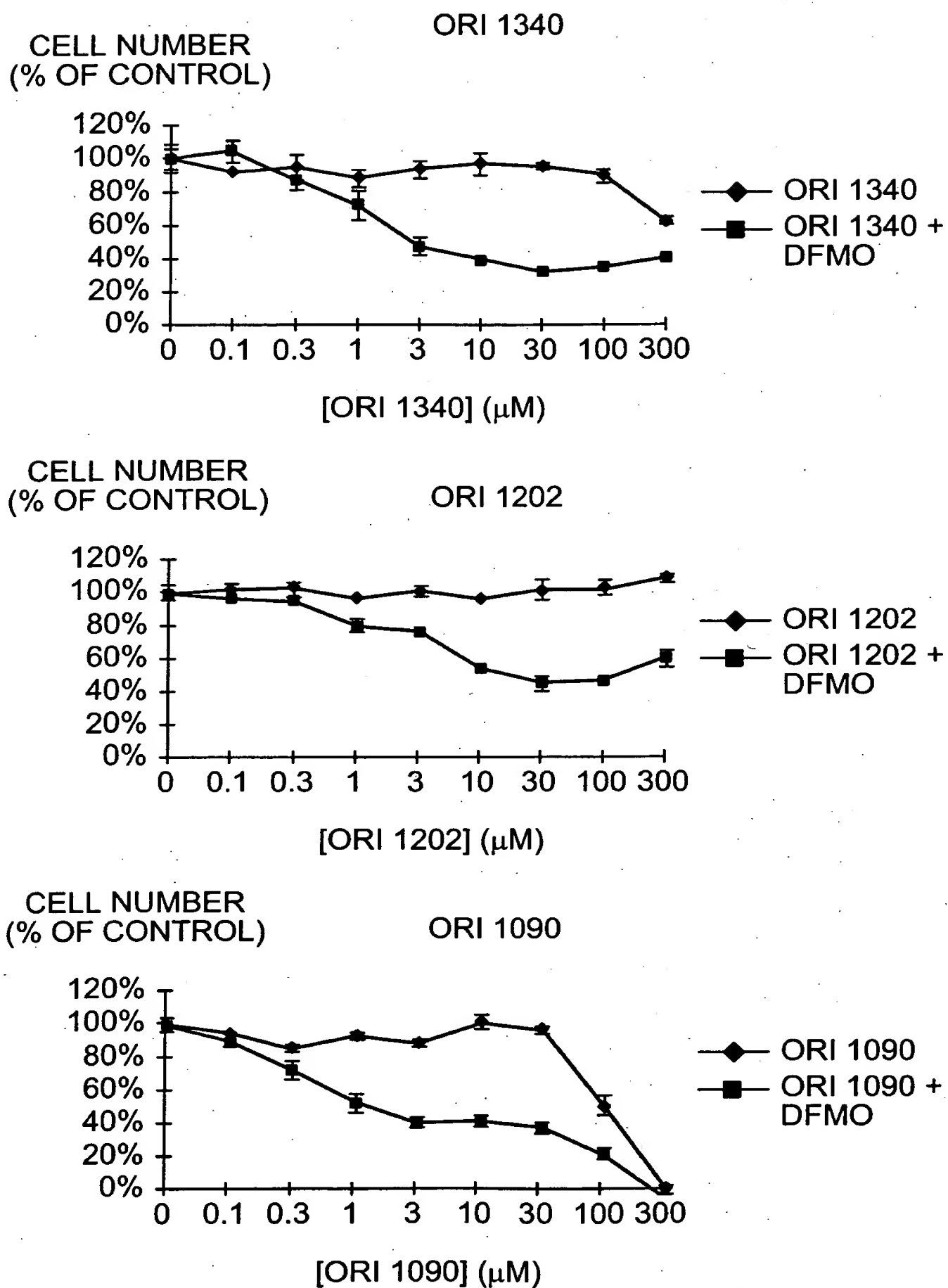


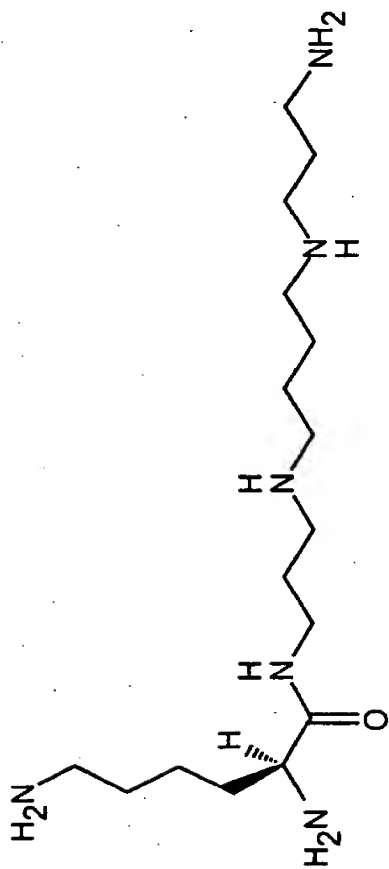
FIG. 42



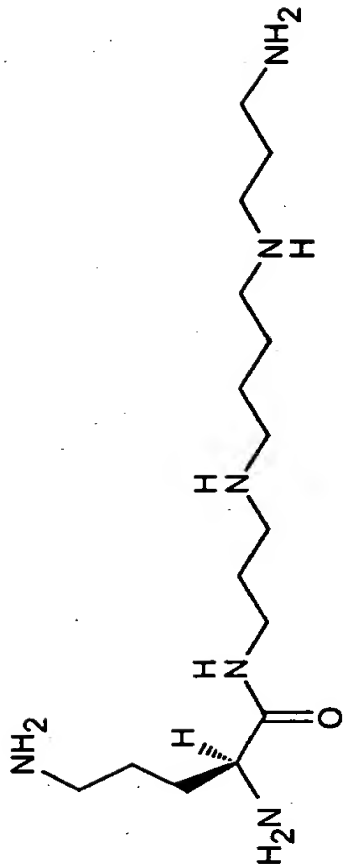
REPLACEMENT SHEET



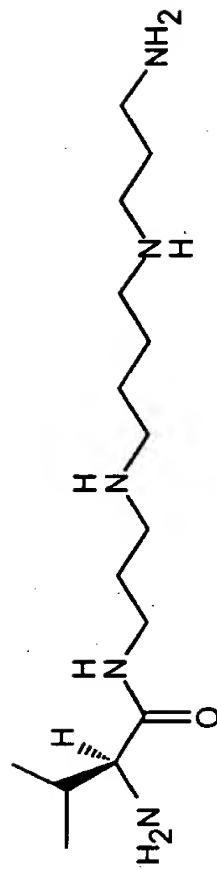
**FIG. 43**



ORI 1202  
L-LYS-SPM



ORI 1224  
L-ORN-SPM

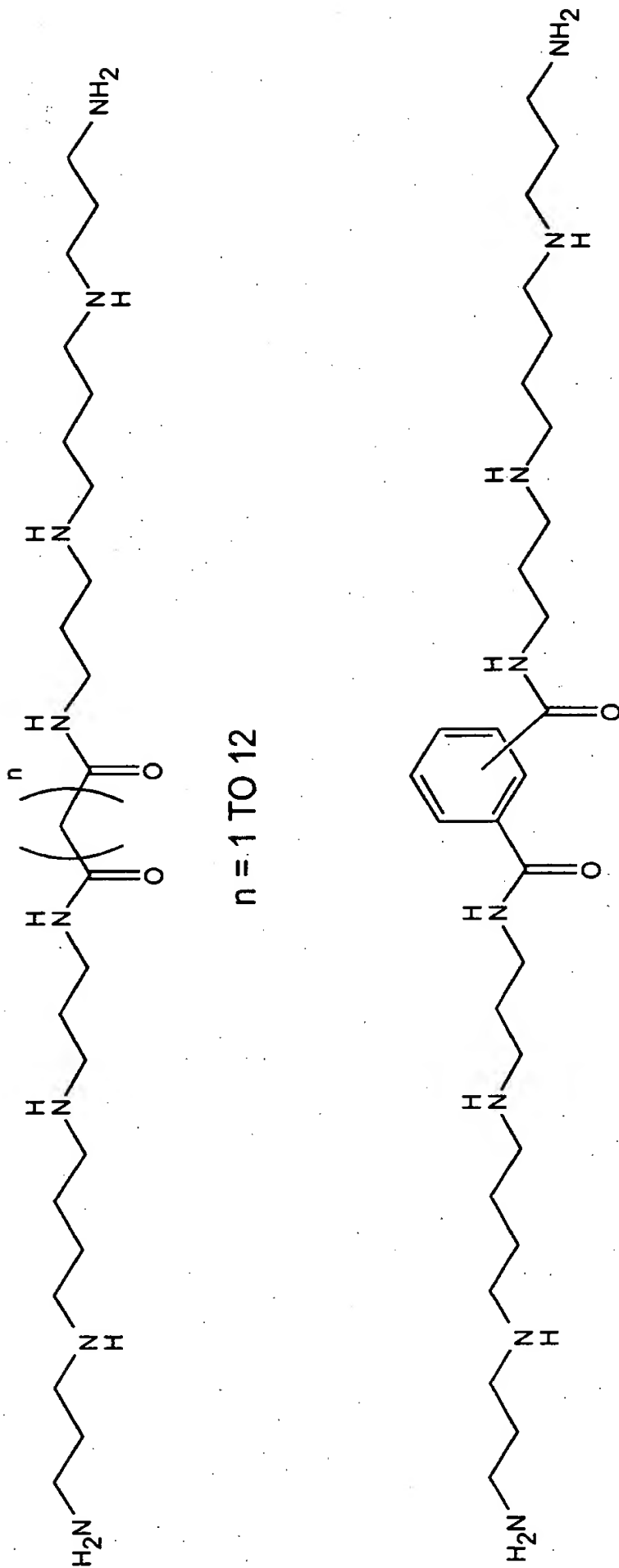


ORI 1157  
L-VAL-SPM

PREFERRED NATURAL AND NON NATURAL AMINO ACID AMIDES OF SPERMINE.

**FIG. 44a**

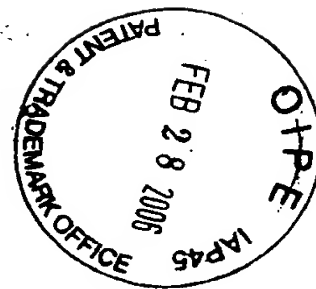


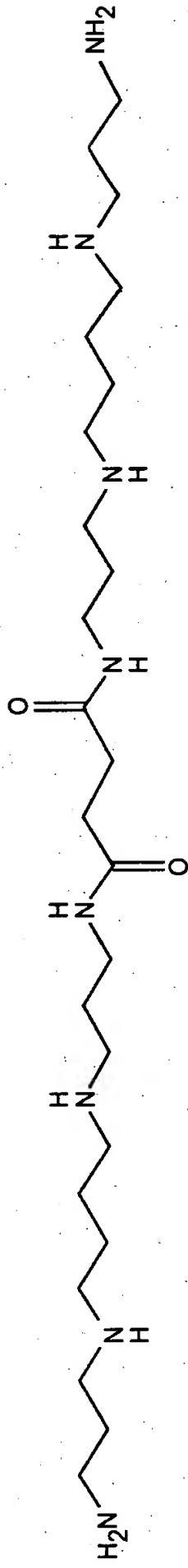


ORTHO, META AND PARA AROMATIC SUBSTITUTION

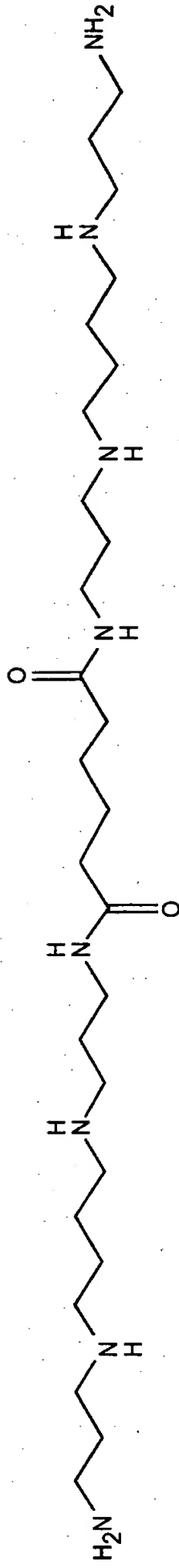
GENERAL STRUCTURE OF BIS-AMIDE DIMERS OF SPERMINE LINKED BY  
AN ALIPHATIC OR AROMATIC DI-ACID CHAIN.

**FIG. 44b**

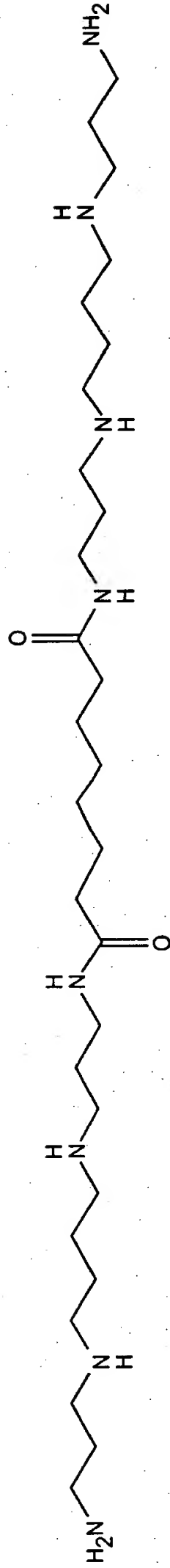




COMPOUND ID 1236



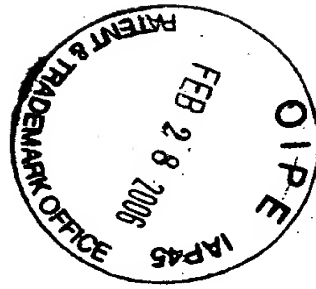
COMPOUND ID 1286

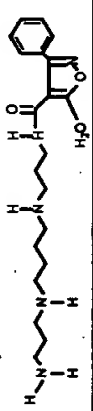
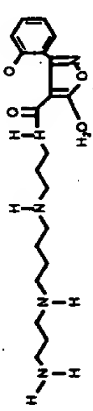
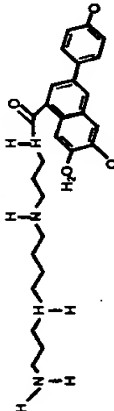
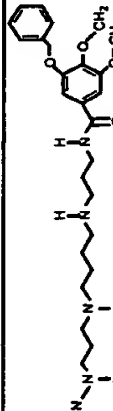
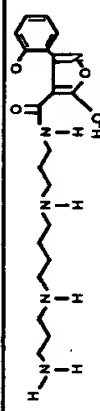
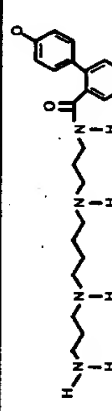
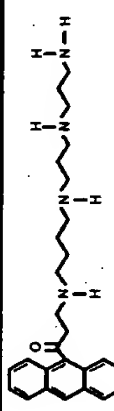
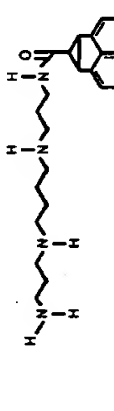
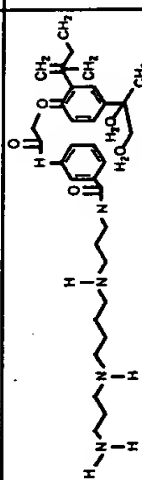


COMPOUND ID 1289

PREFERRED LINKED BIS-AMIDE DIMERS OF SPERMINE.

**FIG. 44c**



N1-MONOSUBSTITUTED POLYAMINES: AMIDES, NO LINKER			TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
ID	MOL WEIGHT	STRUCTURE	MDA		MDA	3.58	>300
1032	387.5295		MDA	0.19	MDA		
1033	421.9745		MDA	1.0	MDA		>300
1035	516.5189		MDA	0.28	MDA		50
1037	472.6331		MDA	0.084	MDA		100
1038	407.9474		MDA	>10	MDA		>300
1039	502.4918		MDA	>10	MDA		30
1043	407.5635		MDA	0.344*	MDA	22.3	200
1053	394.5648		MDA	0.4	MDA		
1072	595.8762		mda	>1			

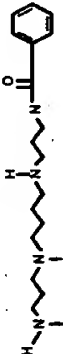
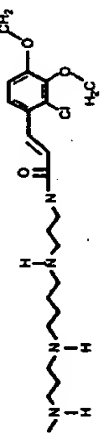
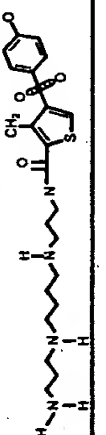
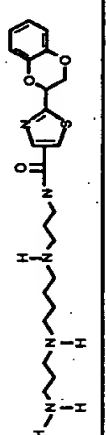
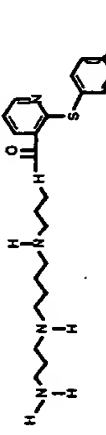
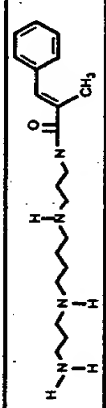
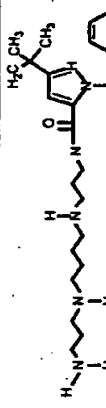
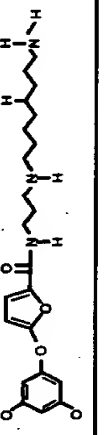
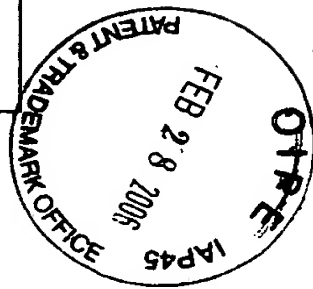
1073	306.4549		MDA		>10	mda	150		>300
1076	426.9911		MDA		0.116	mda	28.1		150
1077	501.1143		MDA		0.165*				
			MDA		0.11*	mda	2.46		56
1078	447.604		MDA		0.037				
			MDA		0.19*	mda			19
						pc-3			19.4
						caco-2			24.4
						cem			6.9
1079	429.6323		MDA		0.594*	pc-3			83
1080	346.5202		MDA		0.062*	mda	7.4		78
						mda			190
1081	442.6531		MDA		0.086				
			MDA		0.297*	mda			26
						pc-3			5.5
						caco-2			23.0
						cem			1.7
1104	457.4043		MDA		0.12	mda			18
						pc-3			20.2
						caco-2			36.2
						cem			4.5

FIG. 45a (CONT. 1)





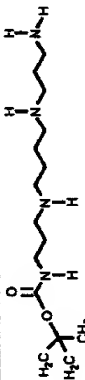
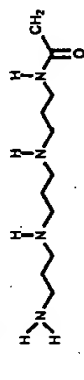
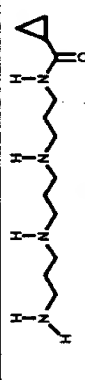
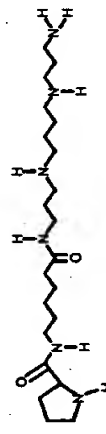
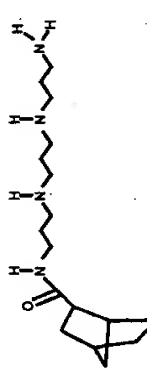

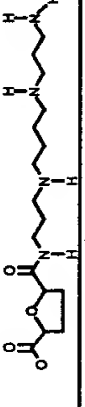
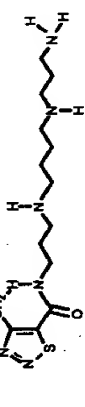
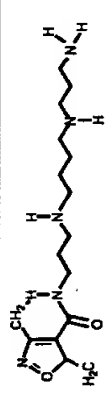
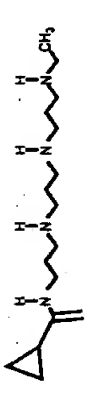
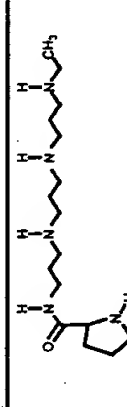
1163	302.4638		MDA	0.083			
1166	230.36				mda		>100
					H157		>100
1167	256.3943				mda		>100
					h157		>100
1169	412.62		MDA	0.0252	mda	>300	>300
					pc-3	20.1	>300
1208	308.47						
1210	352.57						
1211	341.41						
1213	328.4829						
1214	325.46						
1215	284.45						
1216	313.49						

FIG. 45a (CONT. 2)



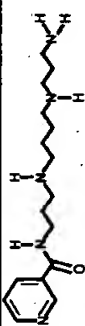

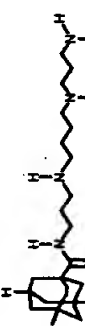
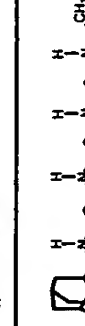
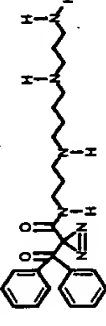
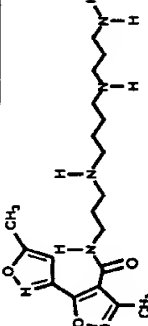
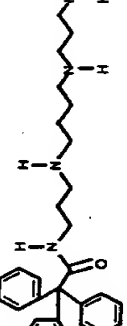
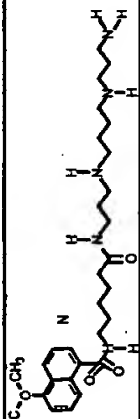
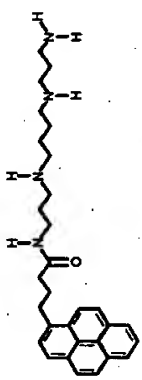
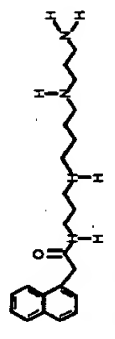
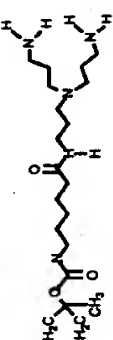
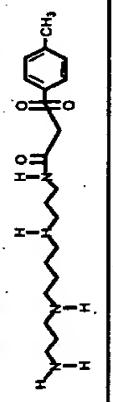

1217	307.44								
1218	307.4424								
1235	364.5792		MDA	1.14					
1240	378.6062				mda	>300		>300	
					pc-3	>300		>300	
1249	470.5594								
1251	392.5053		MDA	>1					
			MDA						
1347	472.6795								

FIG. 45a (CONT. 3)



N1-MONOSUBSTITUTED POLYAMINES: AMIDES, WITH LINKER						
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO
1002	548.7972		MDA-MB-231	0.024*	MDA-MB-231	2.2
			A172	0.16*		
			PC-3	0.0339*		
			MCF-7	0.012		
			MDA	0.0152*		
			CaCo	0.0078*		
			mda	0.0245-0.13	MDA-MB-231	2.0
			mda	0.0052-0.03	mda	0.63
			MDA	8.6nM	mda	2.0
					mc1-7	72
					casmc	
1009	472.6795		MDA	0.104	MDA	<3
			A172	0.12		
					MDA	9.4
1022	370.5425		MDA	0.230	MDA	8.26
1040	401.5974				mda	>100
1055	398.5718		MDA		mda	6.9
1056	396.5807		MDA	0.11*	MDA	150

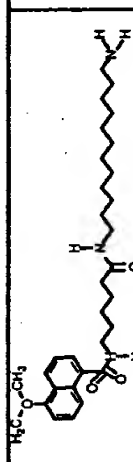
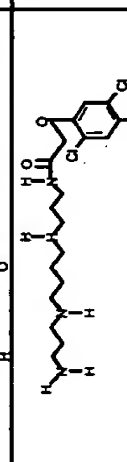
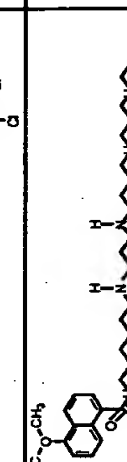
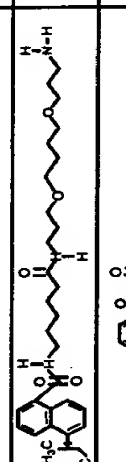
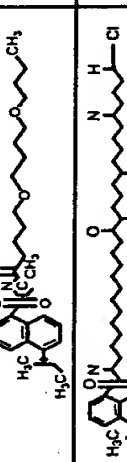
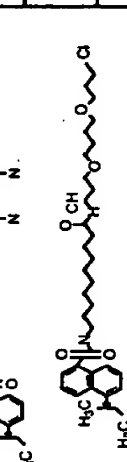
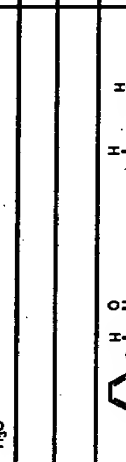
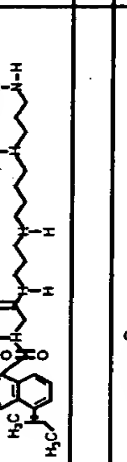
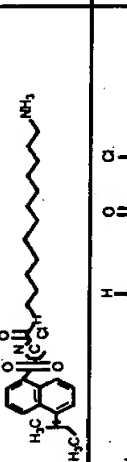
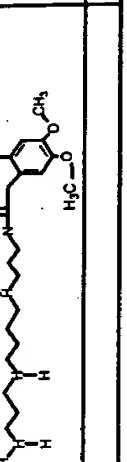
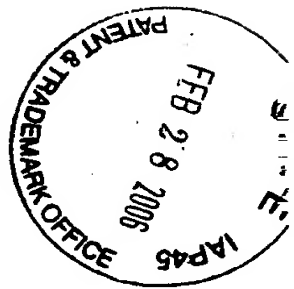
1059	546.822		MDA	6.5*	mda		70
1060	439.8164		MDA	0.099	mda	>300	>300
1061	576.8513		MDA	0.00895	mda	<3	360
			MDA	0.0942			
			MDA	41.2 nM	mda	9.81	560
			MDA	57.8 nM			
1063	550.7666		MDA	88*	mda		18
1064	510.7013		MDA	>30	mda	>100	>100
1065	632.9597		MDA	0.76	mda	>30	>30
1066	650.9722		MDA	19.2*	mda		27
					pc-3		8.7
					caco-2		>30
					cem		2.9
1067	492.6888		MDA	0.070*	mda	>30	>30
			MDA	0.43			
1068	506.7567		MDA	>30	mda	>30	>30
1069	459.431		mda	>1			
			MDA	0.74			

FIG. 45b (CONT. 1)




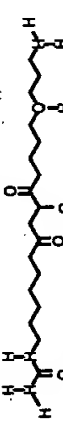
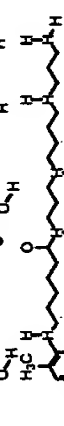
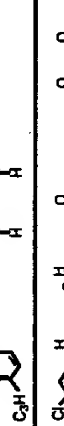
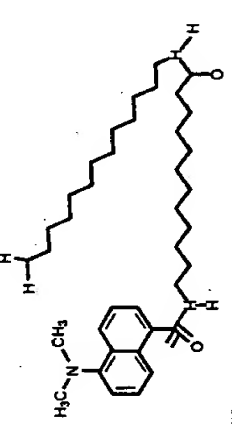

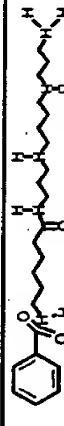

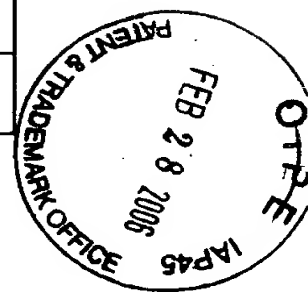
1083	401.5974					mda		>100
1085	373.5025		mda	81.3		mda		>300
1086	481.6		mda	2.2				
1090	629.2897		mda	0.0147		mda	0.960	300
			MDA	0.00997				
			PC-3	0.070*				
			MDA	0.01324				
			MCF-7	0.0252				
			CaCo	0.013*				
			MDA	0.022*				
			MDA	13.3-15.7 nM		mda	1.54	>300
			MDA	0.0216 Pre-				
			MDA	0.0273				
			HT-29	0.0812				
			Du145	0.016				
1093	630.9845		mda	>30				
				19.2*				
1096	594.8446		MDA	0.094*		mda	26.5	190
			MDA	0.0397				
			MDA	0.117				
1097	455.6678		MDA	0.0817		mda	5.24	1200
						mda	5.52	1200
1098	590.8348		MDA	2.1		mda	263	>1000

FIG. 45b (CONT. 2)



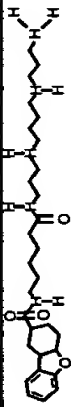
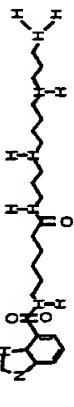

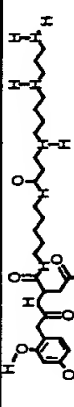
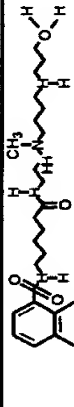
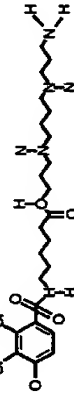

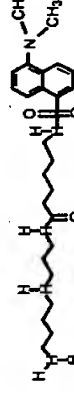
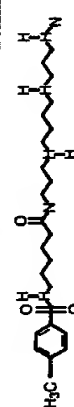
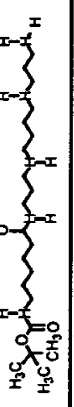
1100	545.75		MDA	0.0195*	mda	0.588	180
			MDA	0.00485			
			PC-3	0.0164			
			MDA	0.0105*			
			MCF-7	0.0196			
			CaCo	0.00663			
1101	513.7292		MDA	0.0793	pc-3	3.0	>300
1107	314.5186		MDA	0.182	mda	6.17	>300
					mda	63	
1111	565.7189		MDA	0.19			
1113	564.8402		MDA	0.0167	mda	1.44	380
1114	559.0029		MDA	0.073	pc-3	1.43	320
1115	491.7012				mda	1.59	>300
					pc-3		>300
					mda	315	>300
1116	491.7012				pc-3		>300
1119	469.6949		MDA	0.0568*	mda	315	>300
					pc-3	5.1	>10
1120	415.6245		MDA	0.0687*	mda	11.5	>10

FIG. 45b (CONT. 3)

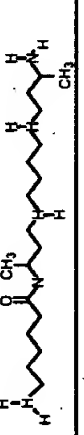

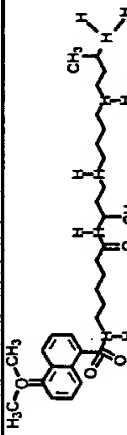
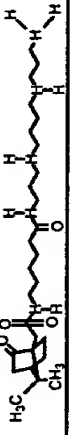
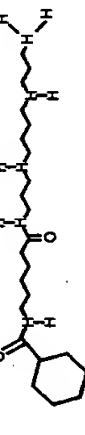
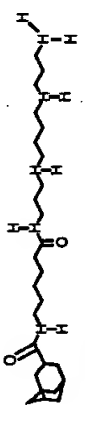
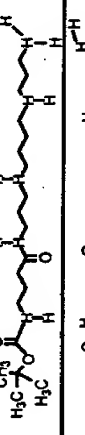
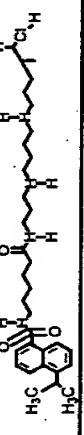
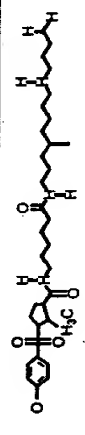

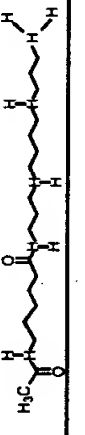
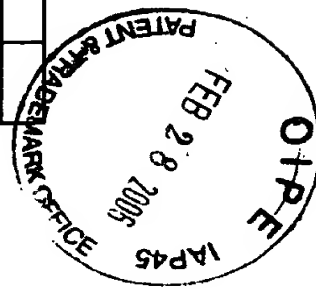
1122	343.5604		MDA	0.248				
			MDA	0.397				
1122	657.3438		MDA	0.012	MDA	5.20		255
			MDA	0.0136	PC-3	1.23		530
			PC-3	0.038				
			Du145	0.0985				
1124	576.8513		MDA	0.0178	mda	13.2		>300
			MDA	0.0466				
1129	529.7915		MDA	0.17*	mda	68.2		>300
					pc-3	71.3		>300
1135	425.6633		MDA	0.167*	pc-3	29.2		>300
1136	477.7398		MDA	0.0446*	mda	66.5		>100
					mda	9.68		>1000
1149	387.5703		MDA	0.0344	pc-3	9.23		>1000
			MDA	0.136*	mda	>100		>100
1152	490.8377		MDA	0.0903	pc-3			99
1156	614.275		MDA	0.085	mda			>100
			MDA	0.00955	mda	1.55		>300
1160	393.5961		MDA	0.0564*	pc-3	2.56		>300
					mda	45.8		>300
1161	357.5438		MDA	>0.3	pc-3			64
					mda	>300		>300
			MDA	>1	pc-3	>300		>300

FIG. 45b (CONT. 4)





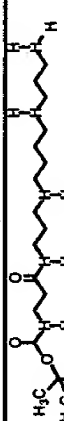



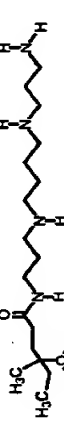
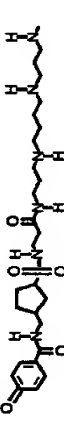

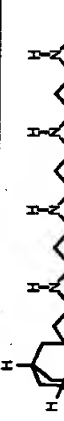
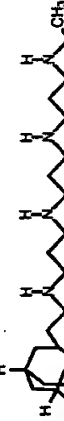
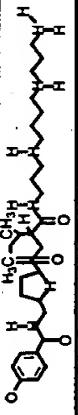
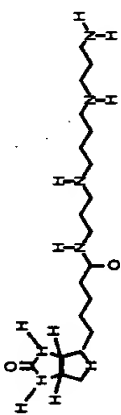

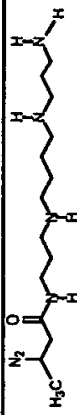
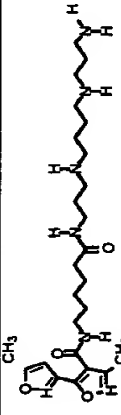
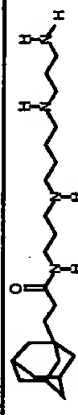


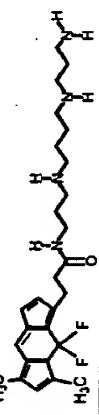
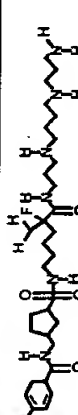
1165	607.2209		MDA	0.0143	mda	<3	199
					pc-3	<3	188
1174	459.66		MDA	0.3	mda	>300	>300
					pc-3	>300	>300
1175	373.5432		MDA	0.061	mda	>300	>300
					pc-3	>300	>300
1179	369.555		MDA	1>uM	mda	24.7	>300
1180	439.6684		MDA	0.0265	mda	>300	>300
					pc-3	>300	>300
1203	244.3832						
1209	359.52		MDA	>1	mda	62	277
					pc-3	72	227
1233	587.2084		MDA	0.0355*	mda	1.9	>300
			MDA	0.0185*	pc-3	0.56	>300
1234	506.7159		MDA	0.0565	mda	1.6	>300
					pc-3	0.87	>300
1238	364.5792		MDA	>1	mda		235
					pc-3		208
1239	392.6333				mda		195
					pc-3		173

FIG. 45b (CONT. 5)





1241	615.2626		MDA	0.0262		
1243	428.6448					
1244	359.5189		MDA	0.46		
1245	313.4495					
1254	505.666		MDA	0.0577		
1281	392.6333		MDA	>1		
1298	413.5865					
1305	348.5361					
1315	477.4338					
1340	644.3043					

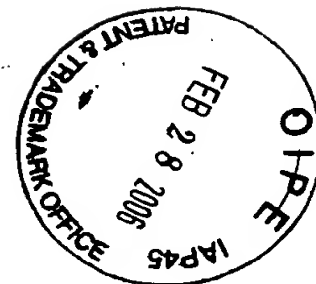
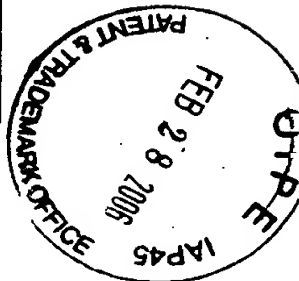


FIG. 45b (CONT. 6)

N1-MONOSUBSTITUTED POLYAMINES: AMIDES, AMINOALKYL		STRUCTURE		TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
ID	MOL WEIGHT							
1091	301.4791					mda		>100
1094	315.5062			MDA	0.075	mda	18	>300
				MDA	0.117	mda	51.5	>1000
				MDA	0.040			
				MDA	0.028-	mda	54	>300
				MDA	0.043			
1110	244.3832			MDA	0.162	MDA		
				MDA	0.190			
1121	343.5604			MDA	0.64	MDA	>300	>300
				MDA	0.5	PC-3		>300
1122	343.5604			MDA	0.248			
				MDA	0.397			
1126	301.4791			MDA	>10	mda		>100
				MDA	0.043*	mda		>100
1150	287.452			MDA	0.0756*	mda	>300	>300
1177	273.4249			MDA	0.0636	pc-3	<3	>300
				PC-3	0.147	MDA	>100	>100
				Du145		PC-3	2.85	>100
1197	301.4791			MDA	0.39	MDA		>300
						PC-3	>300	460

FIG. 45c



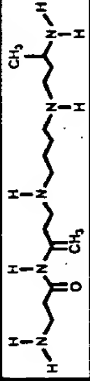
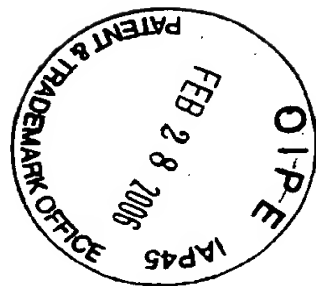
1198	301.4791		MDA	0.424	MDA	>300	>300
					PC-3	299	>300

FIG. 45c (CONT.)



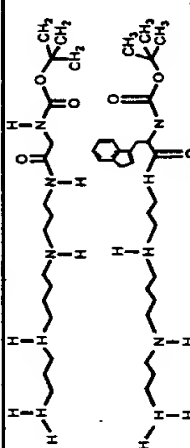
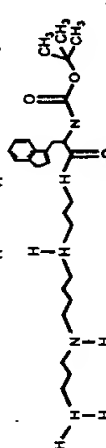
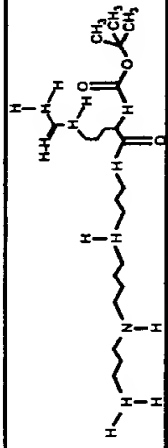
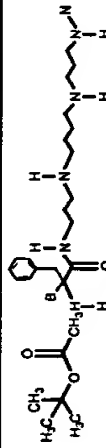
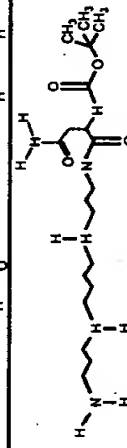
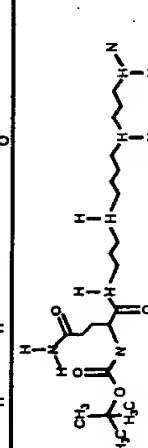
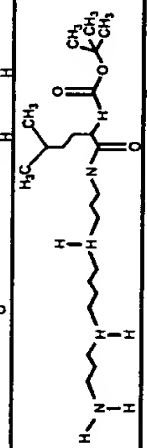
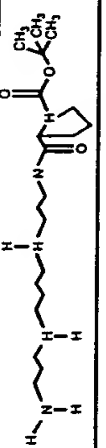
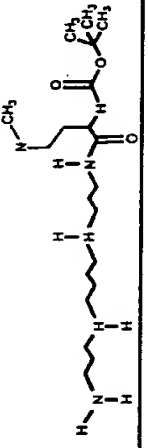
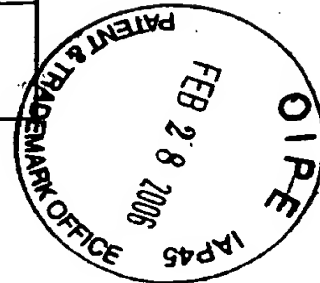
N1-MONOSUBSTITUTED POLYAMINES: AMIDES, PROTECTED AMINO ACID HEAD GROUP		TRANSPORT>CELL LINE		Ki	GROWTH INHIBITION>CELL LINE		HALF EFFECT DRUG DEMO	IC50
ID	MOL WEIGHT	STRUCTURE	MDA		MDA			
1117	359.5161		MDA	0.232*	mda			>100
1118	488.679				pc-3		22.64	>300
1127	458.6526				mda		50.4	>100
1147	481.7281		MDA	0.098*	mda		>100	
1151	416.5685		MDA	>1				
1153	430.5955		mda	0.156				
1155	401.5974		MDA	0.258				
1158	399.5815		MDA	0.183				
1162	433.6614		MDA	0.0913				
			MDA	0.083				

FIG. 45d



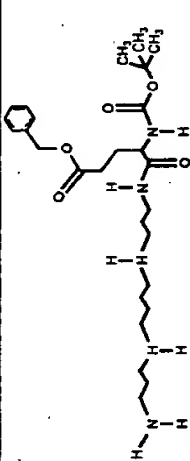
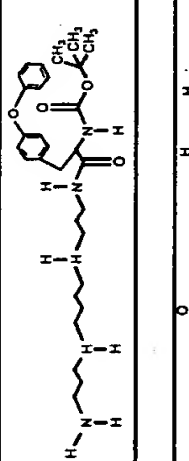
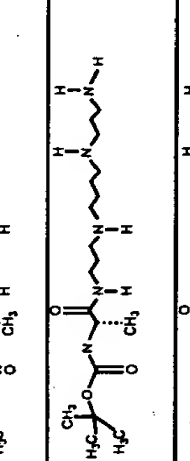
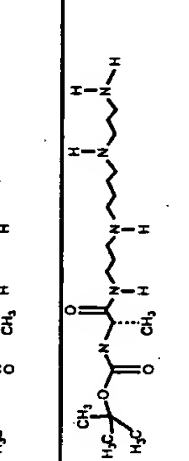
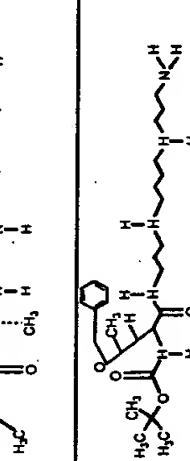


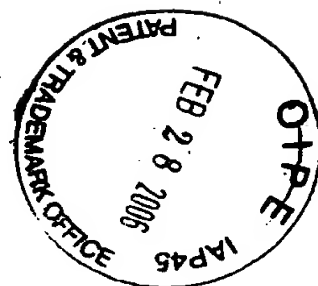
1170 521.7061		MDA	>1	mda	>300	>300
				pc-3	>300	>300
1172 555.7673		MDA	37.1	mda	20	20
				pc-3	20	20
1176 373.5432		MDA	0.0418	mda	>300	>300
				pc-3	14.0	>300
1176 373.5432		MDA	0.0418	mda	>300	>300
				pc-3	14.0	>300
1176 373.5432		MDA	0.0418	mda	>300	>300
				pc-3	14.0	>300
1176 373.5432		MDA	0.0418	mda	>300	>300
				pc-3	14.0	>300
1176 373.5432		MDA	0.0418	mda	>300	>300
				pc-3	14.0	>300
1189 493.6956		MDA	0.465	MDA	52	>300
				PC-3	100	>300

FIG. 45d (CONT.1)



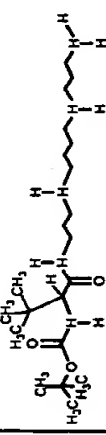
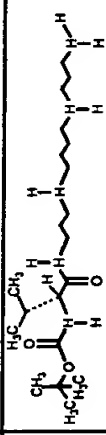
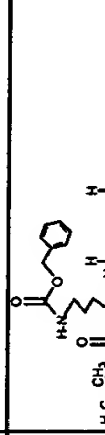
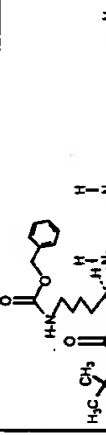
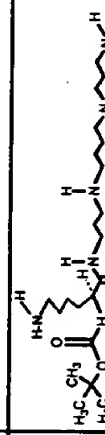
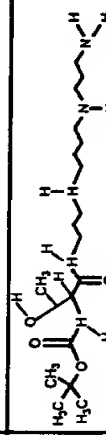
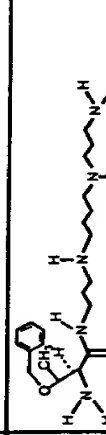
1193	415.6245		MDA		pc-3	>300	>300
				0.265	MDA	89.2	>300
1195	401.5974		MDA		pc-3	91.9	>300
				0.271	MDA	37.9	>300
1199	564.775		MDA		pc-3	70.9	>300
				0.060*	MDA	15.5	>300
1200	464.6567		MDA		pc-3	9.20	>300
				0.039	MDA	29.8	>300
					MDA	41.3	>300
					pc-3	7.87	>300
					pc-3	8.51	>300
1201	430.6392		MDA	0.191	MDA	36.9	>300
1205	403.5697				pc-3	16.9	430
					mda	100	>300
1206	393.5773		MDA	0.1094	pc-3	>300	>300
					mda	19	>300

FIG. 45d (CONT.2)



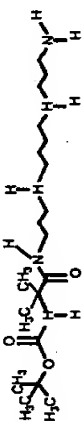
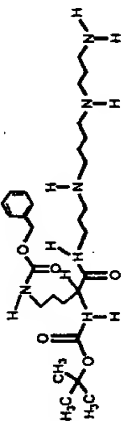
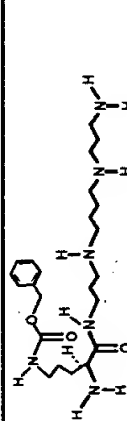
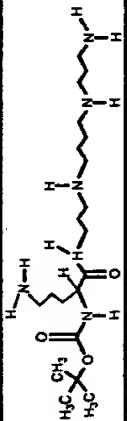
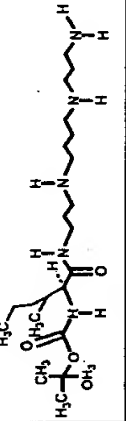
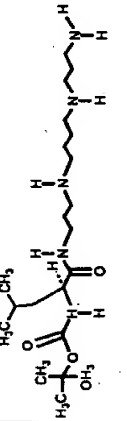
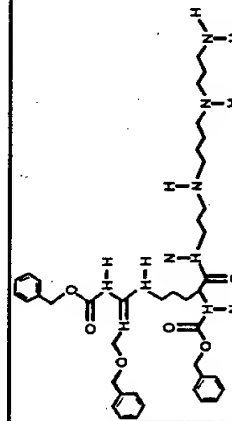
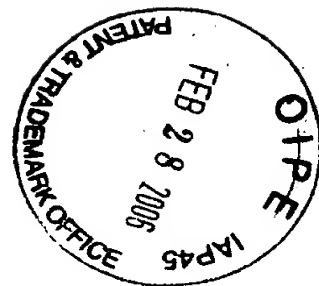
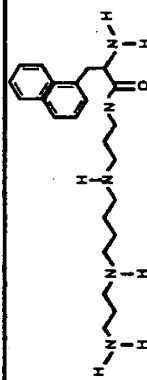
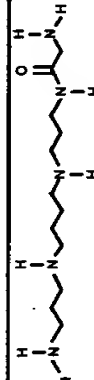
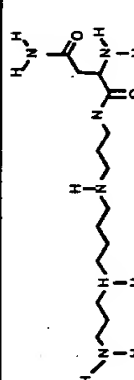
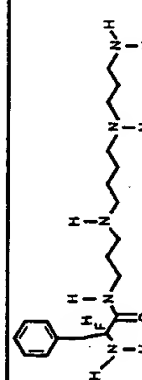
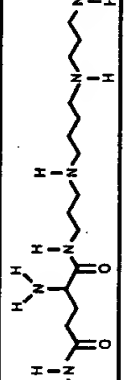
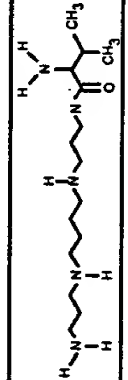
					pc-3	67	>300
1219 387.5703							
1221 550.7479							
1222 450.6296							
1223 416.6121							
1229 415.6245							
1231 415.6245							
1259 760.9417							

FIG. 45d (CONT.3)



N1-MONOSUBSTITUTED POLYAMINES: AMIDES, NATURAL ALPHA-AMINO ACID HEAD GROUP							
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
1095	388.5607		MDA	0.073	mda	5.3	>300
					mda		
			MDA	0.011-	pc-3	8.44	560
						14.05	>1000
					mda	30.0	>300
1125	259.3978		MDA	0.07	mda		>100
			MDA	0.1036*			
1131	316.4501		MDA		pc-3	57.0	>300
					mda	81.97	>1000
					mda	113	>300
					pc-3	57	>300
1148	349.5237		MDA	0.214*	mda		>100
1154	330.4772		MDA	0.047	mda	>300	>300
					pc-3	>300	>300
1157	301.4791		MDA	0.160*	mda	5.58	>300
			MDA	0.0392	pc-3	14.35	>300
			PC-3	0.149	mda	26.42	>300
			Du145	0.109	PC-3	3.86	>300
			MDA	0.0514	pc-3	5.28	
			Du145	0.0467			



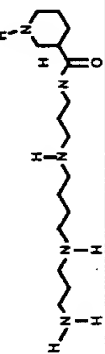
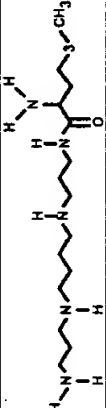
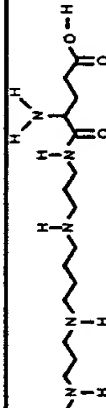
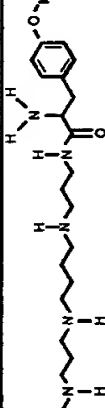
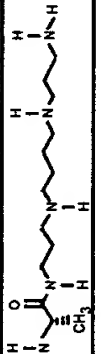
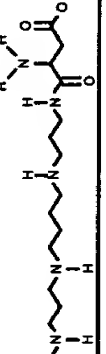
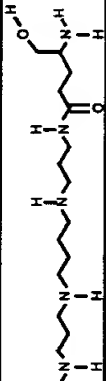
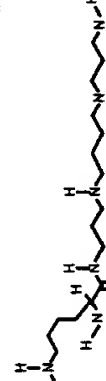
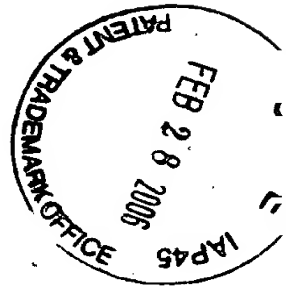
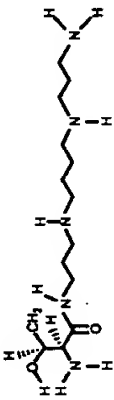
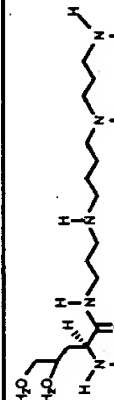
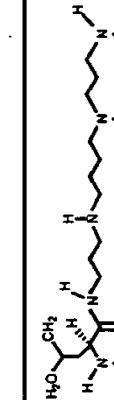
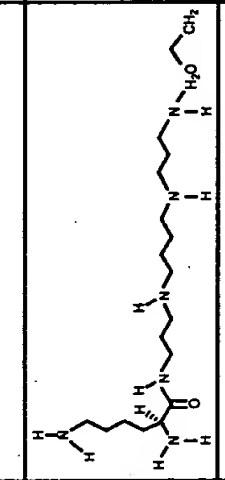
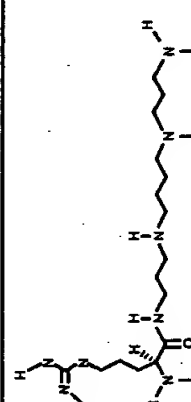
1159	299.4632		MDA	0.0255	mda	92.8	>300
			MDA	0.0499	pc-3	16.5	81
			MDA	0.215-50	MDA	>100	>100
					pc-3	12.1	>100
1164	333.5431		MDA	0.0335	mda	>300	>300
					pc-3	>300	>300
1171	331.462		MDA	0.0765	MDA	300	>300
					pc-3	>300	>300
1173	365.5231		MDA	0.13	PC-3	185	>300
			MDA	0.0768	MDA	94.6	>300
1178	273.4249		MDA	0.0526*	mda	42.7	>300
					pc-3	>300	>300
1186	317.4349		MDA	0.167	pc-3	>300	>300
					MDA	300	>300
1187	289.4243		MDA	0.38	PC-3	213	>300
			MDA	0.0453	MDA	25.5	>300
1202	330.5209		MDA	0.0295	PC-3	20.8	>300
					MDA	4.75	>300
			PC3	0.748	PC-3	5.30	>300
			MDA	0.147	pc-3	1.7	
			MDA	0.032*			
			MDA	0.05			
			HT-29	0.185			

FIG. 45e (CONT.2)



1207	303.4514		MDA			0.13	mda	6.5	>300
1228	315.5062		MDA			0.124	pc-3 mda	62 9.1	>300 >300
1230	315.5062		MDA			0.0323	pc-3 mda	4.0 >300	>300 >300
1237	374.6181		MDA			0.113	pc-3 mda	6.2 >300	>300 >300
1260	358.5343		MDA			0.099	pc-3 mda	>300 6.80	>300 >100
							pc-3	3.04	>100


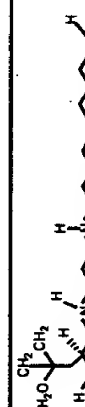
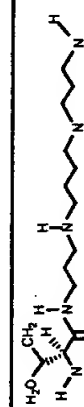
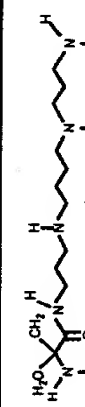

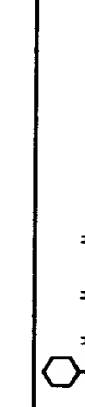

N1-MONOSUBSTITUTED POLYAMINES: AMIDES, NON-NATURAL ALPHA-AMINO ACID HEAD GROUP		TRANSPORT>CELL LINE		GROWTH INHIBITION>CELL LINE		HALF EFFECT DRUG DFMO		IC50	
ID	MOL WEIGHT	STRUCTURE	MDA	Ki	MDA				
1188	313.4466		MDA	>1 µM	MDA			320	
1194	315.5062		MDA	10.6	PC-3			214	
			MDA	0.0727*	MDA	5.32		>300	
					PC-3	7.51		>300	
					MDA	16.19		>300	
					PC-3	1.82		>300	
1196	301.4791		MDA	0.0483	MDA	9.03		>300	
1220	287.452		MDA	0.16	PC-3	8.01		>300	
					mda	8.0		>300	
1224	316.4938		MDA	0.0432	pc-3	2.4		>300	
					pc-3	3.0		>300	
1227	355.5715		MDA	0.0515	mda	4.37		>300	
			MDA	0.241	mda	7.8		>30	
1309	388.5607				pc-3	0.95		>30	

FIG. 45f



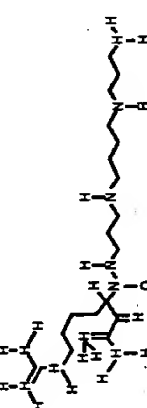
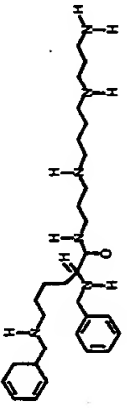
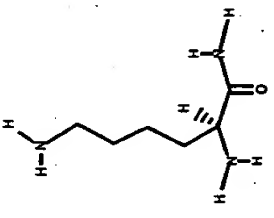
N1-MONOSUBSTITUTED POLYAMINES: AMIDES, AMINO ACID DERIVATIVE HEAD GROUP		TRANSPORT>CELL LINE		GROWTH INHIBITION>CELL LINE		HALF EFFECT DRUG DFMO IC50	
ID	MOL WEIGHT	STRUCTURE	Ki				
1304	418.6337				mda	85	>300
1310	510.7726				pc-3 mda	15.0 4.2	244.8
1355	145.206				pc-3 mda	1.7	>10000

FIG. 45g



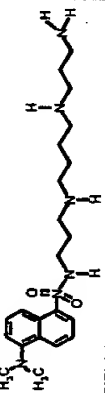
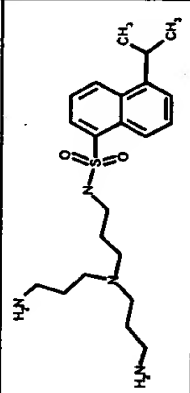
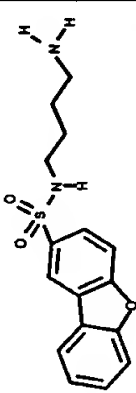
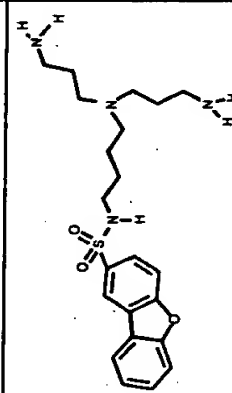
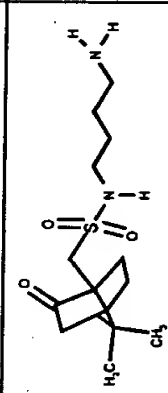
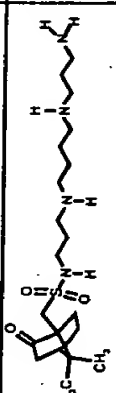

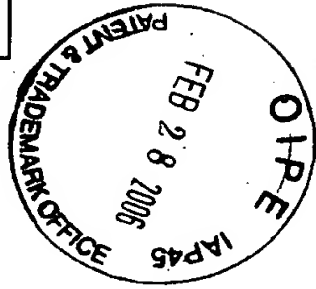
N1-MONOSUBSTITUTED POLYAMINES: SULFONAMIDES		TRANSPORT>CELL LINE		GROWTH INHIBITION>CELL LINE		HALF EFFECT DRUG DFMO	
ID	MOL WEIGHT	STRUCTURE	Ki	MDA	MDA	IC50	
1001	435.6365		.039	MDA	MDA	20	600
1003	421.6094		.08	A172	A172		
			1	MDA	MDA	100uM	>300
1005	318.3975		23	A172	A172		28 uM
1006	446.6164		1.46	mda	MDA		40 uM
				A172	A172		20
1007	302.4389		60	A172	MDA		50
					mda		>300
1008	416.6308		>10	MDA	MDA		>300
1010	442.6282		0.110	MDA	MDA	1.7	20
			0.082	A172	MDA	1.05	18

FIG. 45h



1011	435.6365		MDA	0.066*	MDA	6.0	50
1012	421.6094		MDA	>10	MDA	<30	50
							150
1013	435.6365		MDA	3.5	MDA	13.4	50
			A172	1.34			
1014	421.6094		MDA	>10	MDA		100
1015	489.6881		MDA	2.9	MDA		15
			A172	1.6	DC-3		>30
					CaCO-2		18.2
					cem		>30
1016	475.661		MDA	>10	MDA		13
1017	392.5676		MDA	.187	MDA	14.2	50
			A172	.24			

FIG. 45h (CONT.1)



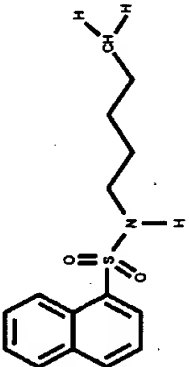
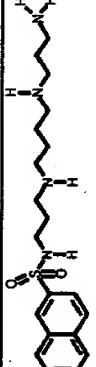
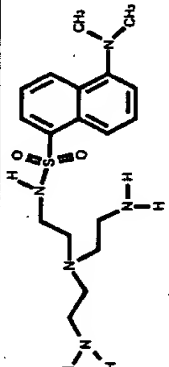
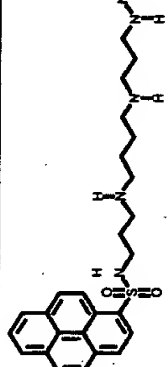
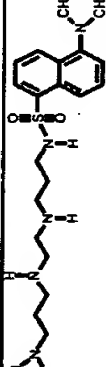
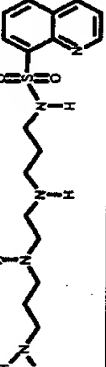
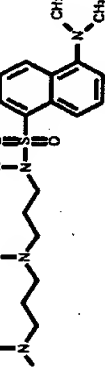

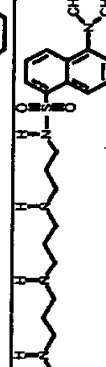
1018	278.3758		mda	>30	MDA		120
1019	392.5676		MDA	0.2°	MDA	7.5	50
1020	379.5281		A172	0.37	MDA	4.4	50
1023	466.6505		MDA	.091	MDA		22
1024	407.5823		A172	.075	MDA		50
1025	365.501		MDA	4.3	MDA		>300
1026	364.5135		MDA	2.7	MDA		50
1027	322.4322		MDA	>10	MDA		>300
1028	421.6094		MDA	11.4	MDA		50

FIG. 45h (CONT.2)



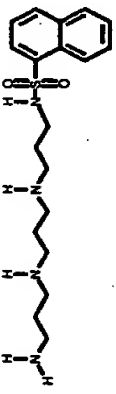
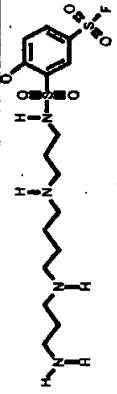
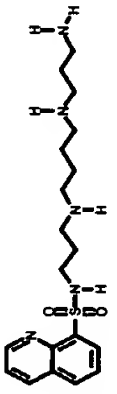
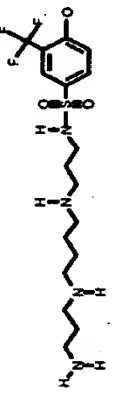

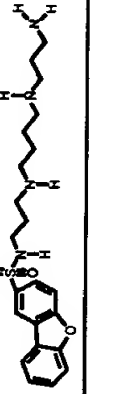
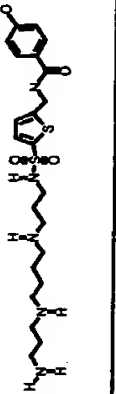
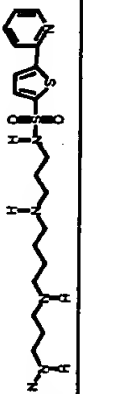
1029	379.5281		MDA	3.4	MDA		>300
1030	458.0054		MDA	0.08	MDA	125	>250
1031	393.5552		MDA	0.43	MDA	<10	>300
1034	444.9505		MDA	0.24	MDA	<3	50
					mda	8.7	50
1036	430.5735		MDA	0.84	MDA		>300
1041	432.5893		MDA	0.066	MDA	95	12
					pc-3		6.2
					caco-2		16.1
					cem		0.79
					mda	12.6	53.0
					pc-3		12.4
					mda		46.1
					pc-3		6.5
1044	516.129		MDA	0.156*	MDA	3	180
			MDA	0.0582	mda	<3.0	190
			MDA	0.130			
			MDA	0.13			
1045	425.6192		MDA	0.228	MDA	13	180
			MDA	0.164	mda	7.3	140
			MDA	0.32			

FIG. 45h (CONT.3)





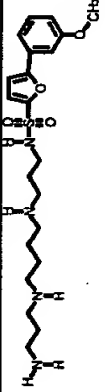
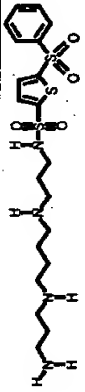
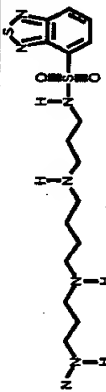
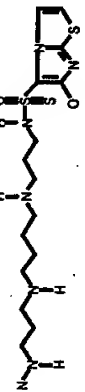



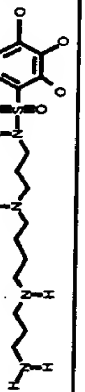

1046	472.6979		MDA	0.44	mda	6.92	58
			MDA	0.0677	pc-3		34.8
					caco-2		>30
					cem		8.9
1047	488.6944		MDA	0.375	mda	7.3	170
			MDA	0.177			
1048	400.5686		MDA	0.421	mda	26.7	>300
1049	423.0024		MDA	>3	mda		>300
1050	494.0602		MDA	0.108	MDA	2.26	140
			MDA	0.0537			
1051	481.684		MDA	0.28	mda	6.5	>300
			MDA	0.076			
1052	342.5071		MDA	0.16*	mda	30	>300
1054	445.8422		MDA	0.025	MDA	<3.0	50
			MDA	0.0829	mda	7.89	20
					pc-3		19.8
					caco-2		27.1
					cem		2.6
1057	434.7334		MDA	0.17	mda		100

FIG. 45h (CONT.4)



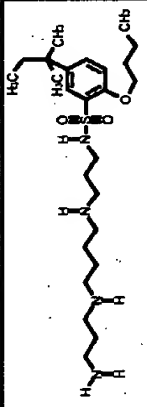
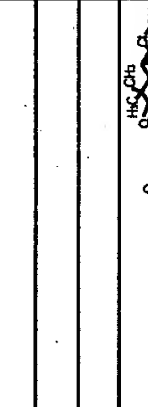
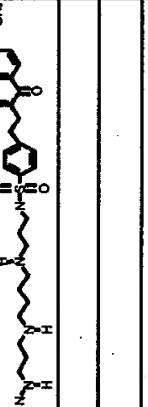
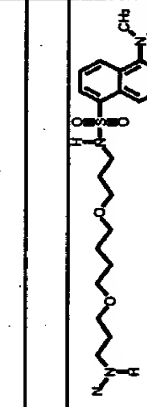
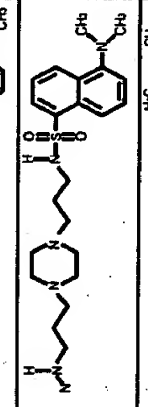
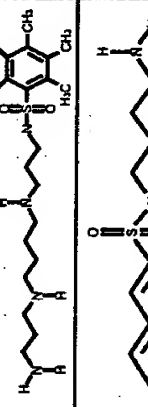
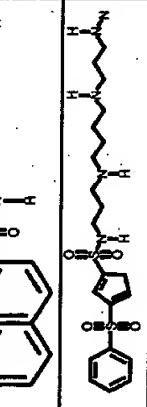
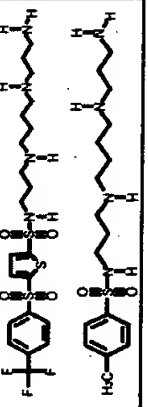
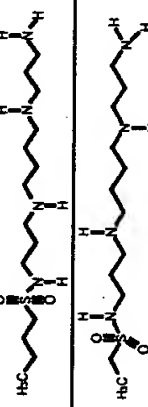


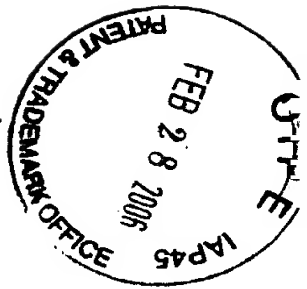
1058	484.7503		MDA	0.17*	mda		6
					pc-3		5.9
					caco-2		14.8
					cem		0.71
1070	587.7877		MDA	>10			
					mda		13
					pc-3		>30
					caco-2		>30
					cem		>30
1074	437.606		MDA	>30	MDA		
1075	433.6206		MDA	>100			
1082	412.6426		MDA	>3	mda		140
1088	278.3758		mda	5.4*			
1103	488.6944		MDA	0.067	mda	3.5	58
1105	557.6804		MDA	0.083	mda		44
1106	356.5342		MDA	0.094	mda		160
1108	322.5167		MDA	0.19	mda		150
1130	294.4625		MDA	0.22	mda	>300	>300

FIG. 45h (CONT.5)



1330	348.5329								
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**FIG. 45h (CONT.6)**



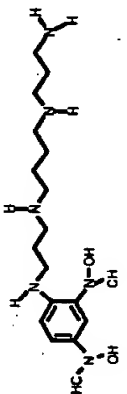
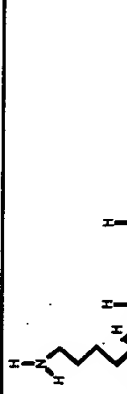
N1-MONOSUBSTITUTED POLYAMINES: N1-MONOSUBSTITUTED AMINES									
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DEMO	IC50		
1004	372.4712								
			MDA	2.2	MDA		5		
			A172	3					
1350	316.5374								

FIG. 45i



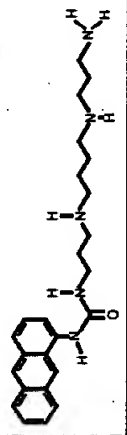
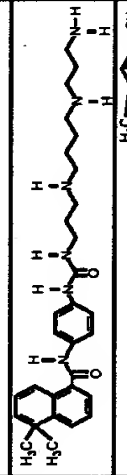
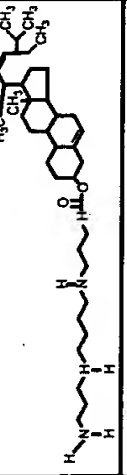
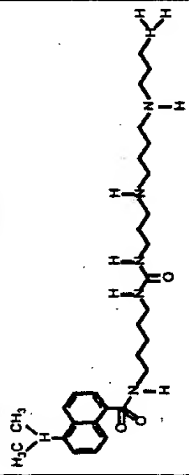
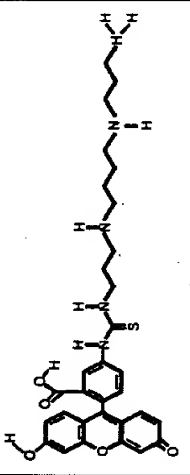
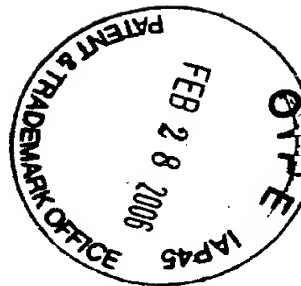
N1-MONOSUBSTITUTED POLYAMINES: OTHER		STRUCTURE		TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
ID	MOL WEIGHT							
1021 (UREA)	421.5906			MDA	0.44	MDA	8.2	35
				A172	.04*			
1042 (UREA)	569.7752			MDA	1	MDA	14.8	100
1071	641.0454			MDA				
1109 (UREA)	563.8118			MDA	0.0674	pc-3	30	>100
				MDA	0.090	mda	95	>100
1295 (THIOUREA)	591.735			MDA	>3			

FIG. 45j



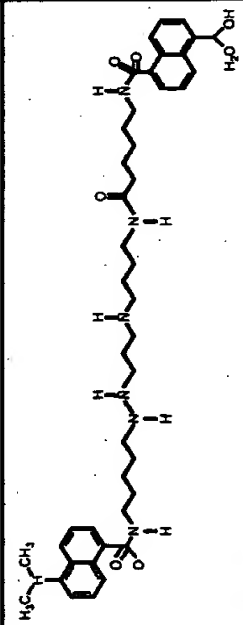
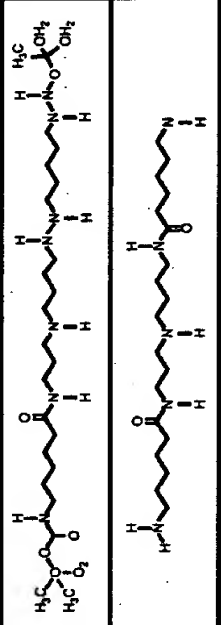
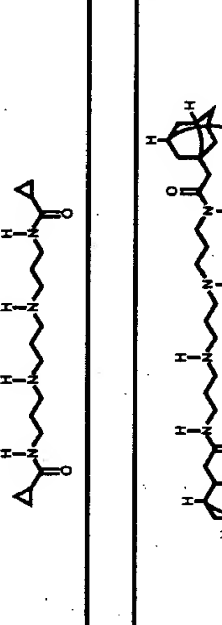
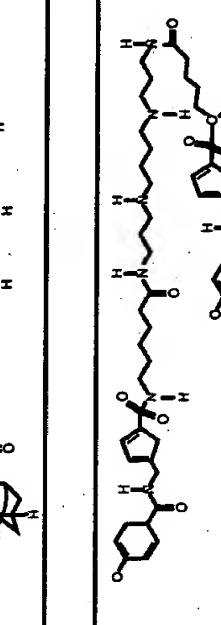
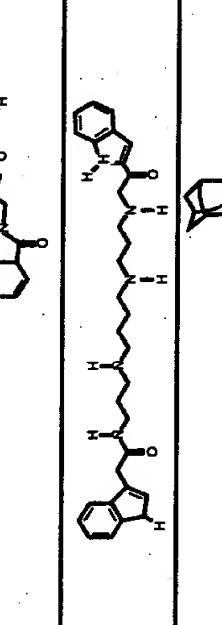
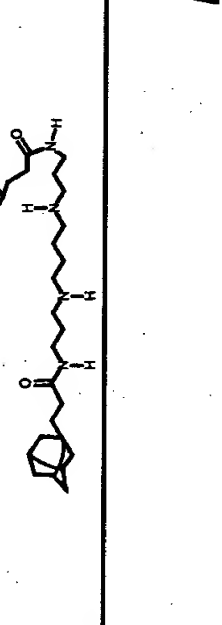

N1, N12-DISUBSTITUTED POLYAMINES: N1, N12-DIACYLPOLYAMINE						
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO IC50
1099	895.2488		MDA	0.54	mda	64
1132	628.9035		MDA	11.6*		
1133			MDA	8.44*	MDA	
1168	324.4702				mda	>100
1242	554.867		MDA	7.4	h157 mda	>100 45.8
1250	1042.21		MDA	0.38	pc-3	20.5
1258	516.6923		MDA	0.44		
1282	582.9211				mda	15.0 59.2

FIG. 46a







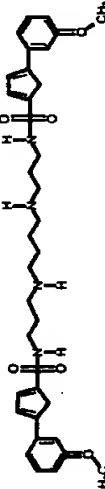
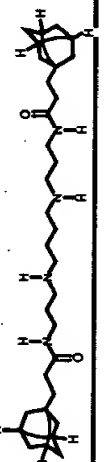

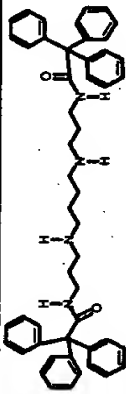
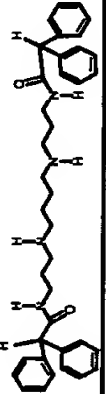
1300	624.8275				pc-3	10.3	120
1306	450.6699				mda		198.0
					pc-3		42.83
1331	594.7981				mda		>300
					pc-3		>300
1333	494.7267				mda		156.7
					pc-3		83.6
1335	743.0503				mda		195.5
					pc-3		60.9
1336	740.7132				mda		195.2
					pc-3		199.5
1337	490.6948				mda		64.1
					pc-3		24.9
1338	743.0135				mda		6.4
					pc-3		6.4
1339	590.8159				mda		185.5
					pc-3		183.5

FIG. 46a(CONT)



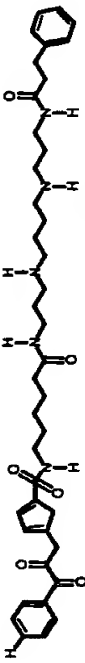
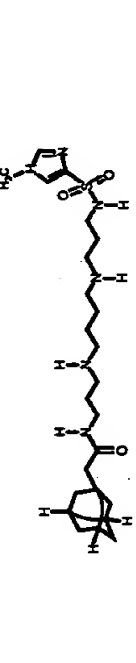
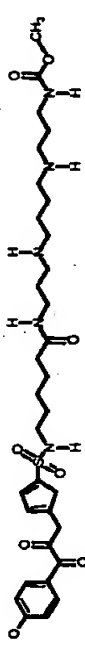
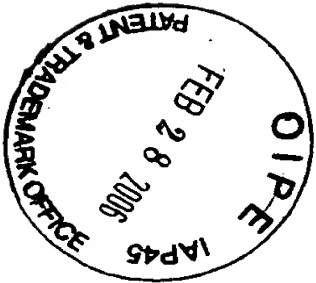
N1,N12-DISUBSTITUTED POLYAMINES: N1,N12-ACYLSULFONYLPOLYAMINES		STRUCTURE		TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DEMO	IC50
ID	MOL WEIGHT							
1266	763.4255							
1276	522.7589			MDA	0.104			
1280	687.3267							

FIG. 46b





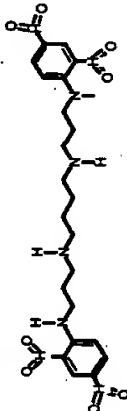
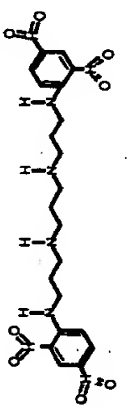
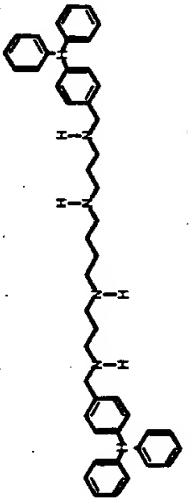
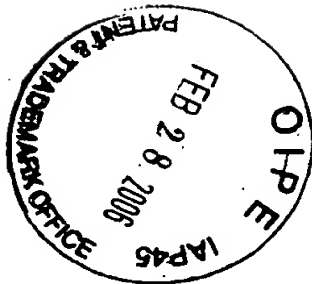
N1, N12-DISUBSTITUTED POLYAMINES: N1,N12-DIALKYLAMINEPOLYAMINES							
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
1247	534.53				mda		0.74
					pc-3		0.61
					mda		1.27
					pc-3		0.84
1279	520.5061				mda		21.3
					pc-3		33.2
1352	717.0217				mda		2.0
					pc-3		1.9

FIG. 46C



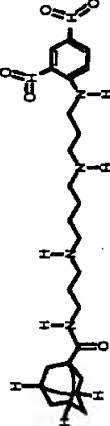
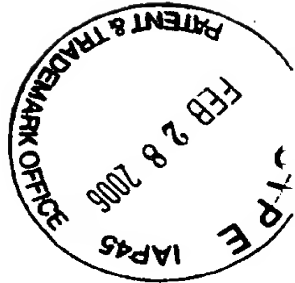
N1, N12-DISUBSTITUTED POLYAMINES: N1,N12-ACYLALKYLAMINEPOLYAMINE							
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
1270	544.7001				mda		161
					pc-3		104

FIG. 46d



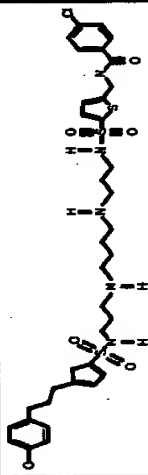




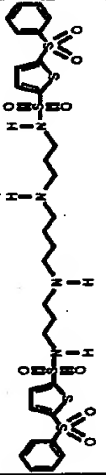
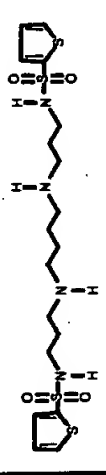
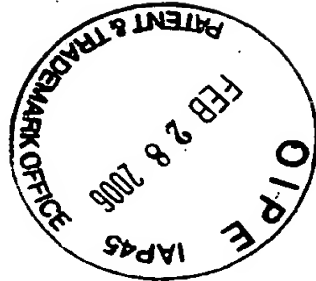
N1,N12-DISUBSTITUTED POLYAMINES: N1,N12-DISULFONYLPOLYAMINE							
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO	IC50
1278	829.91		MDA	0.19			
1293	662.8332				mda		2.0
					pc-3		1.9
					mda		2.03
					pc-3		1.81
					mda		0.60
					pc-3		0.51
1321	510.7229				mda		55.9
					pc-3		25.6
1322	648.8929				mda		9.4
					pc-3		15.2
1323	598.7916				mda		>300
					pc-3		147
1328	775.0434						
1329	494.7202						

FIG. 46e



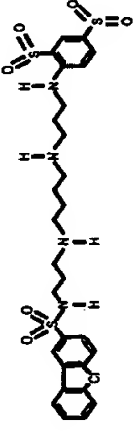
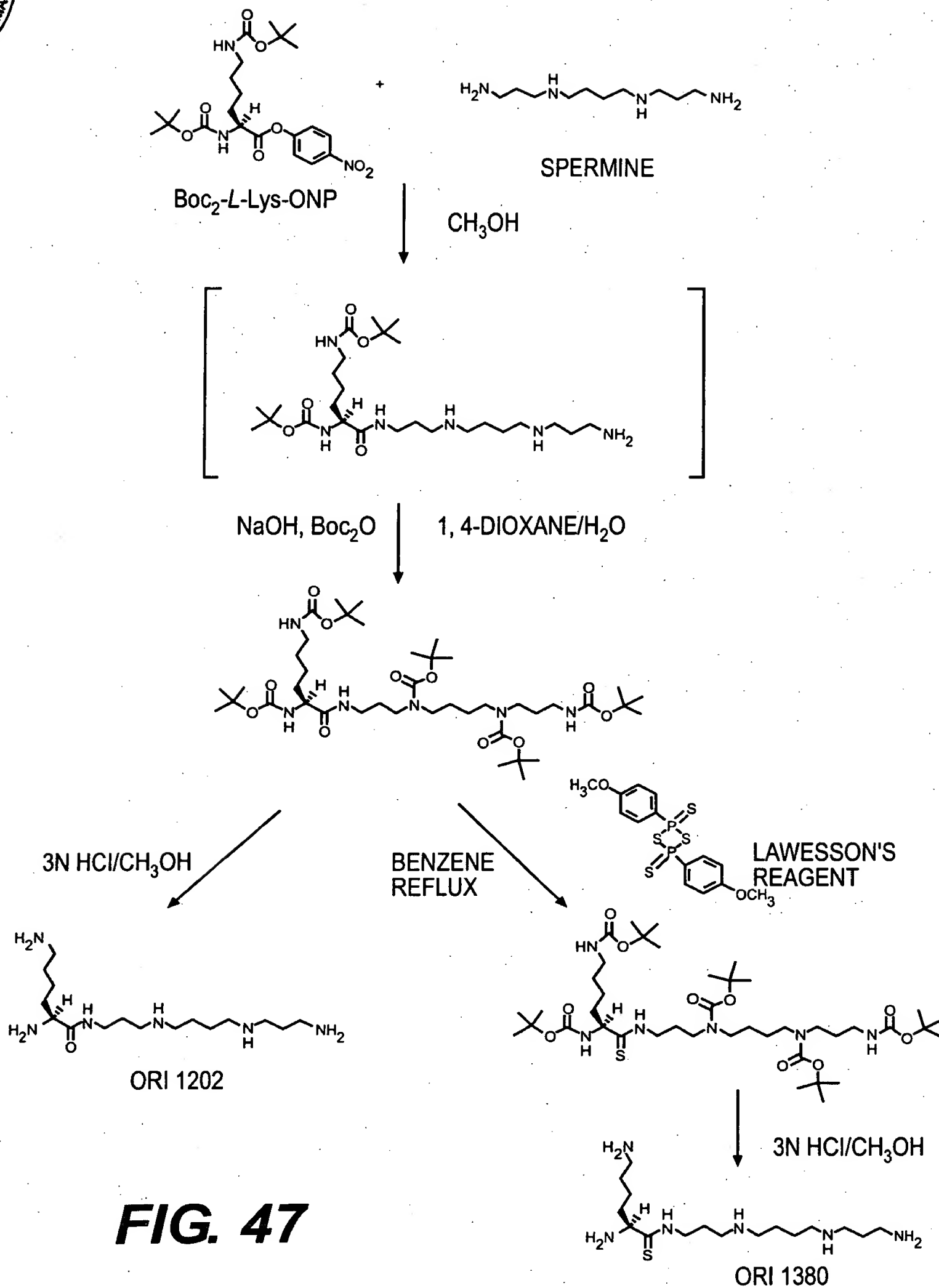
N1, N12-DISUBSTITUTED POLYAMINES: N1, N12-SULFONYLALKYLAMINEPOLYAMINE						
ID	MOL WEIGHT	STRUCTURE	TRANSPORT>CELL LINE	Ki	GROWTH INHIBITION>CELL LINE	HALF EFFECT DRUG DFMO IC50
1349	598.6832					

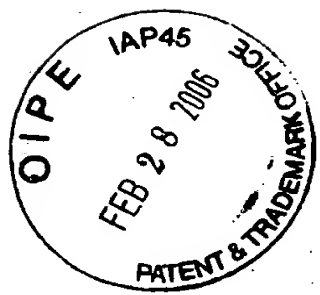
FIG. 46f



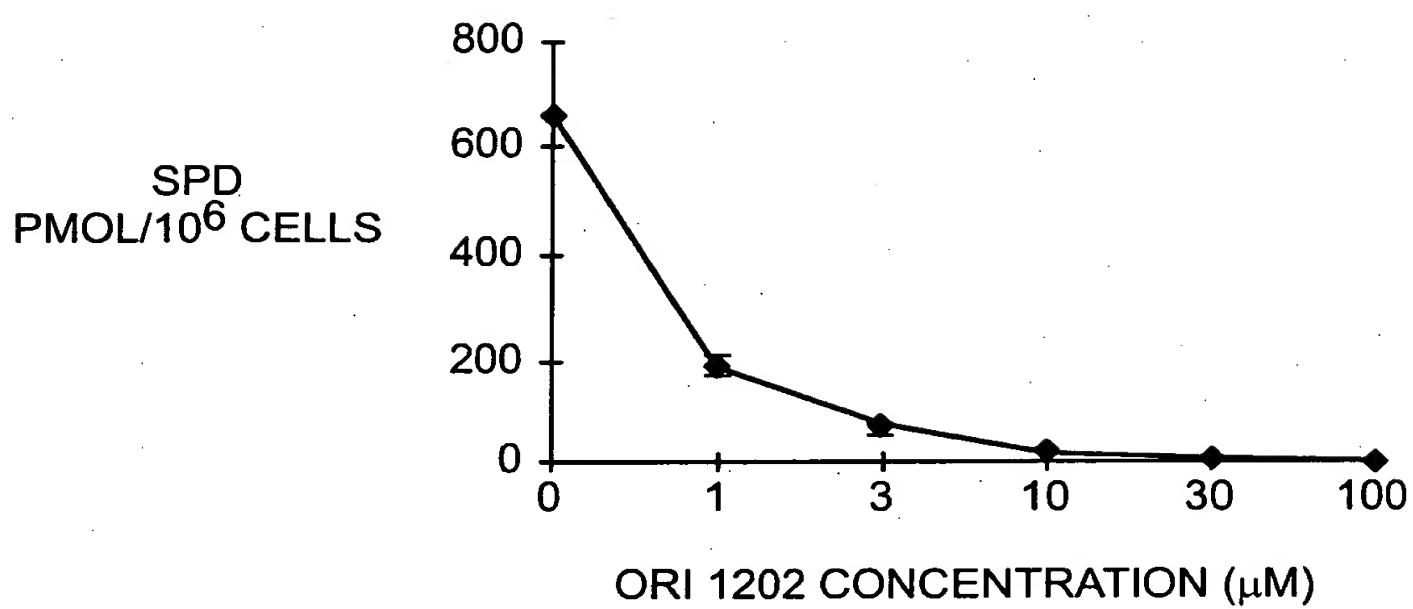
## REPLACEMENT SHEET



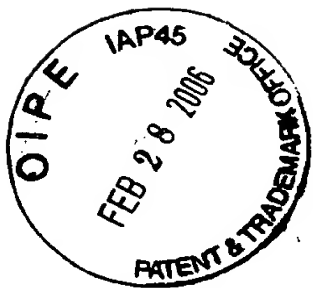
**FIG. 47**



# REPLACEMENT SHEET

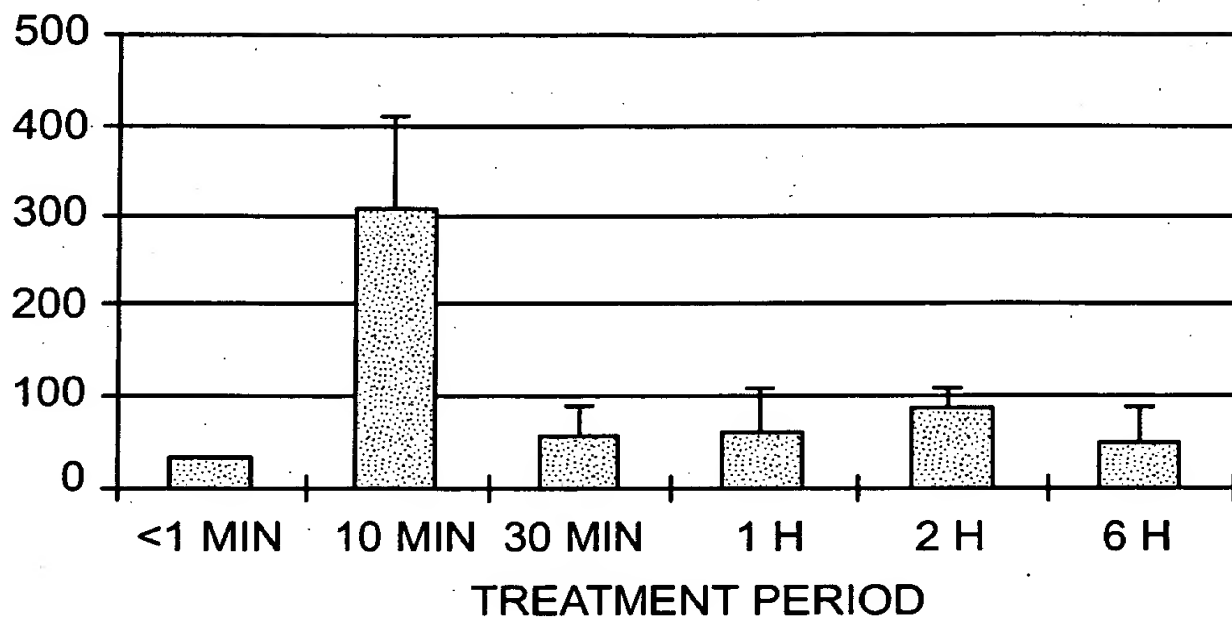


**FIG. 48**



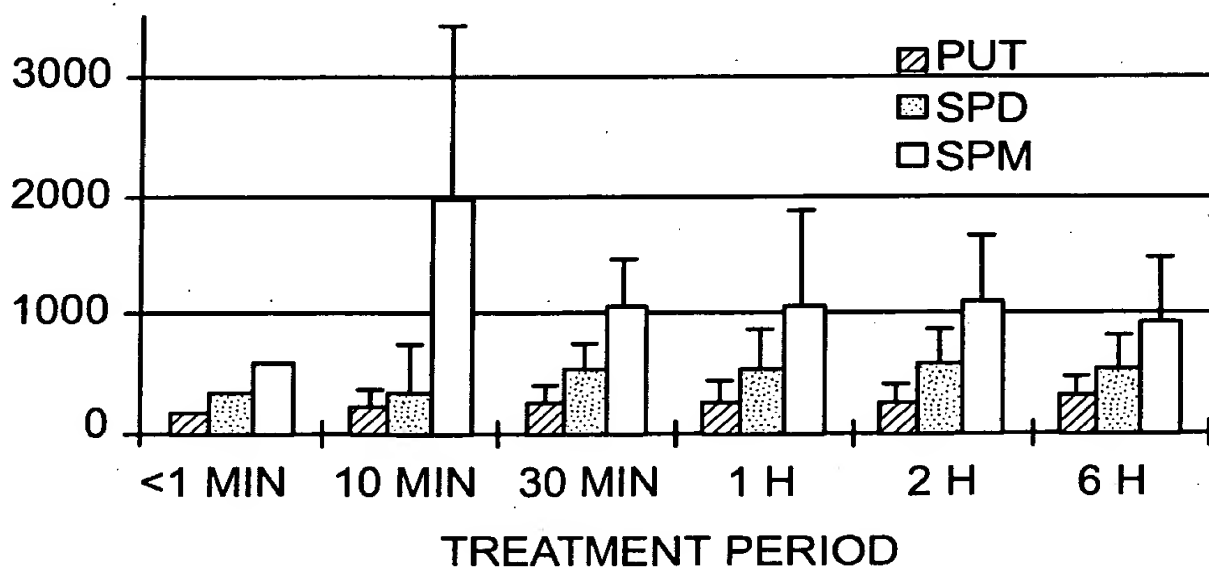
REPLACEMENT SHEET

ORI 1202  
PMOL/10<sup>6</sup> CELLS

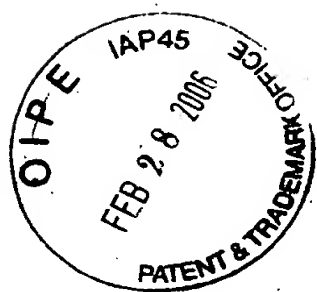


**FIG. 49A**

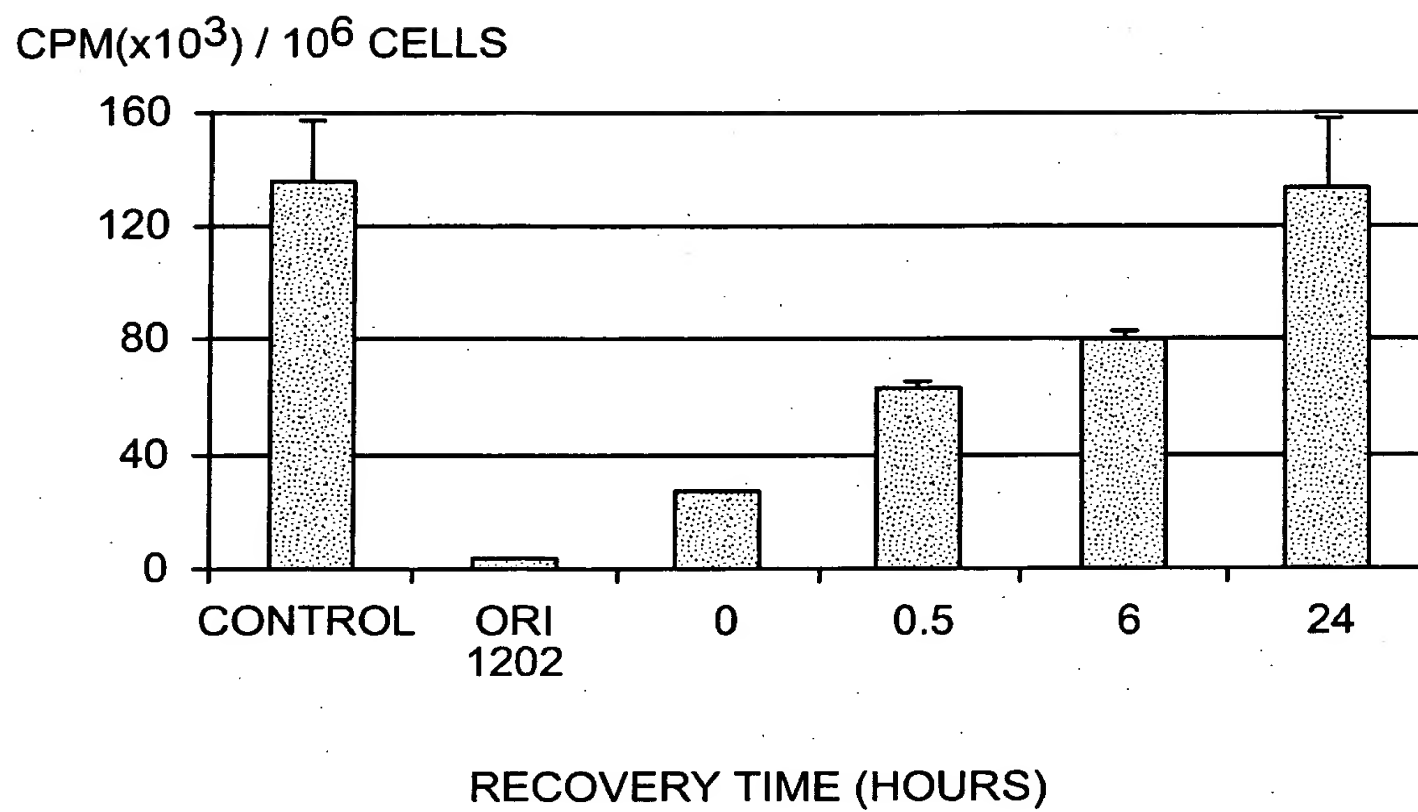
POLYAMINE  
PMOL/10<sup>6</sup> CELLS



**FIG. 49B**

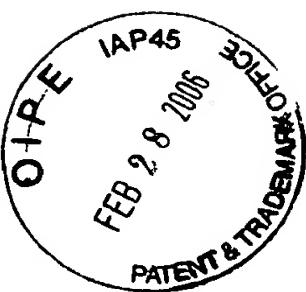


REPLACEMENT SHEET



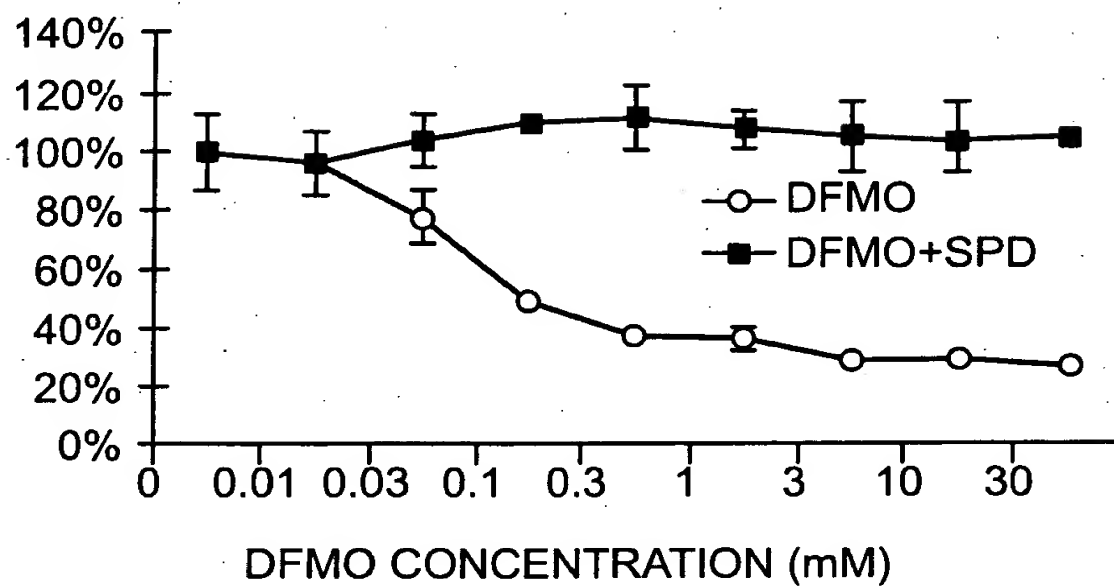
**FIG. 50**





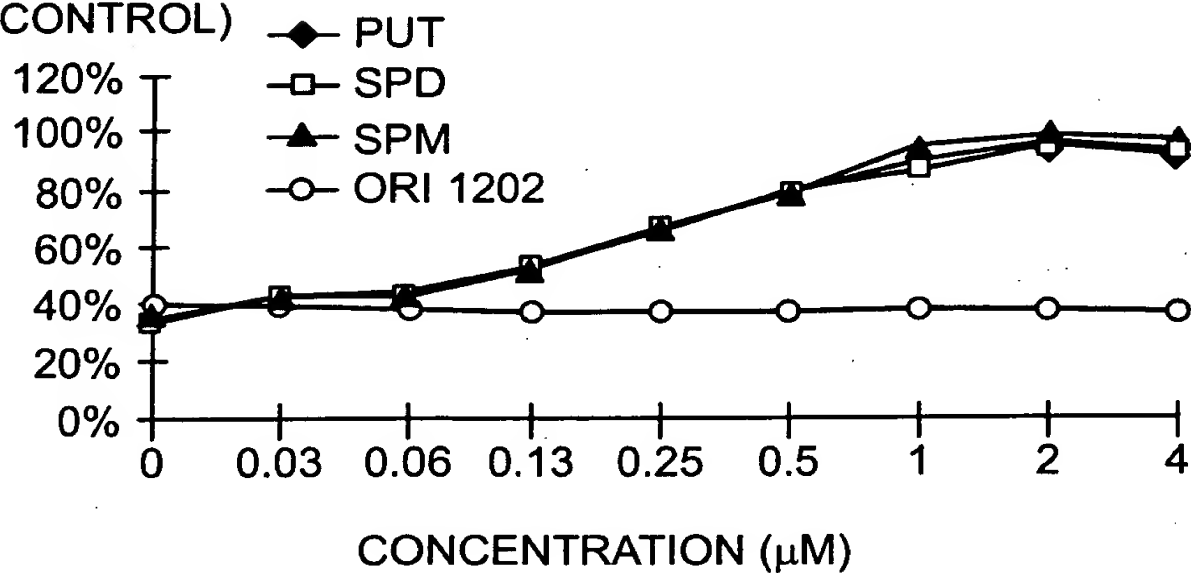
REPLACEMENT SHEET

CELL NUMBER  
(% OF CONTROL)

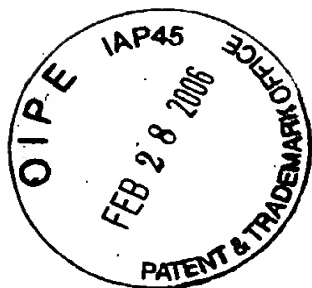


**FIG. 51**

CELL NUMBER  
(% OF CONTROL)

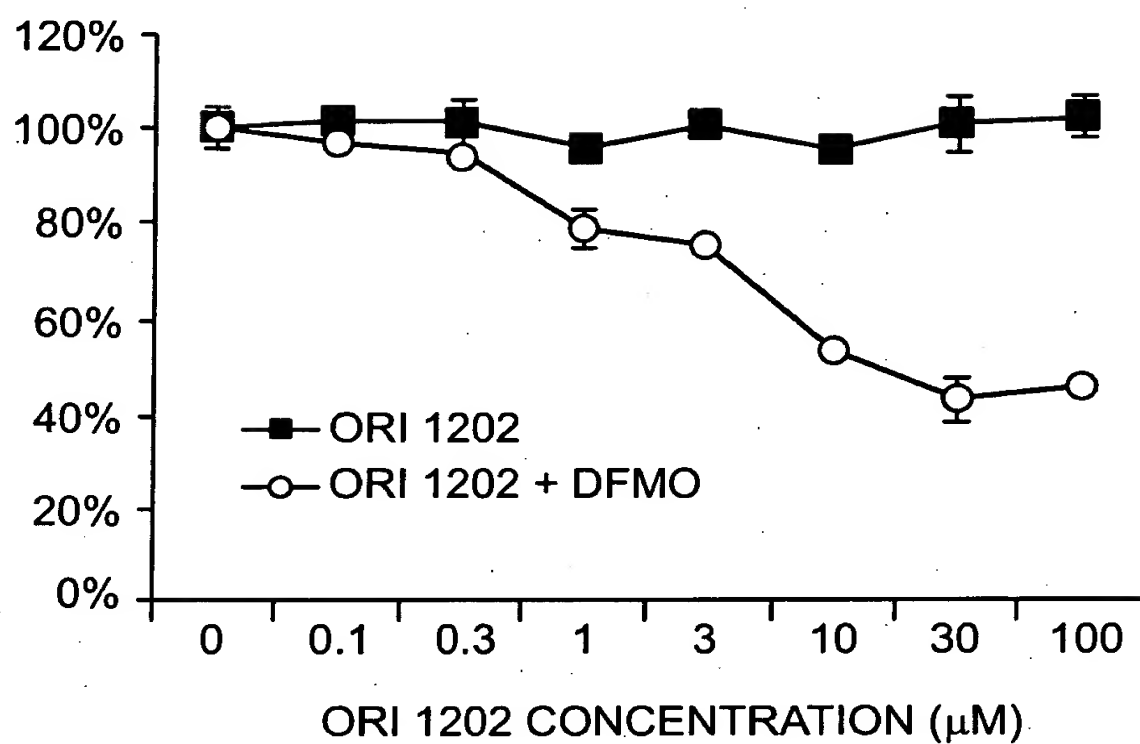


**FIG. 52**

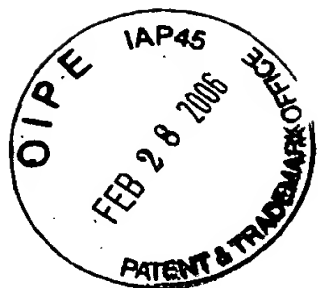


REPLACEMENT SHEET

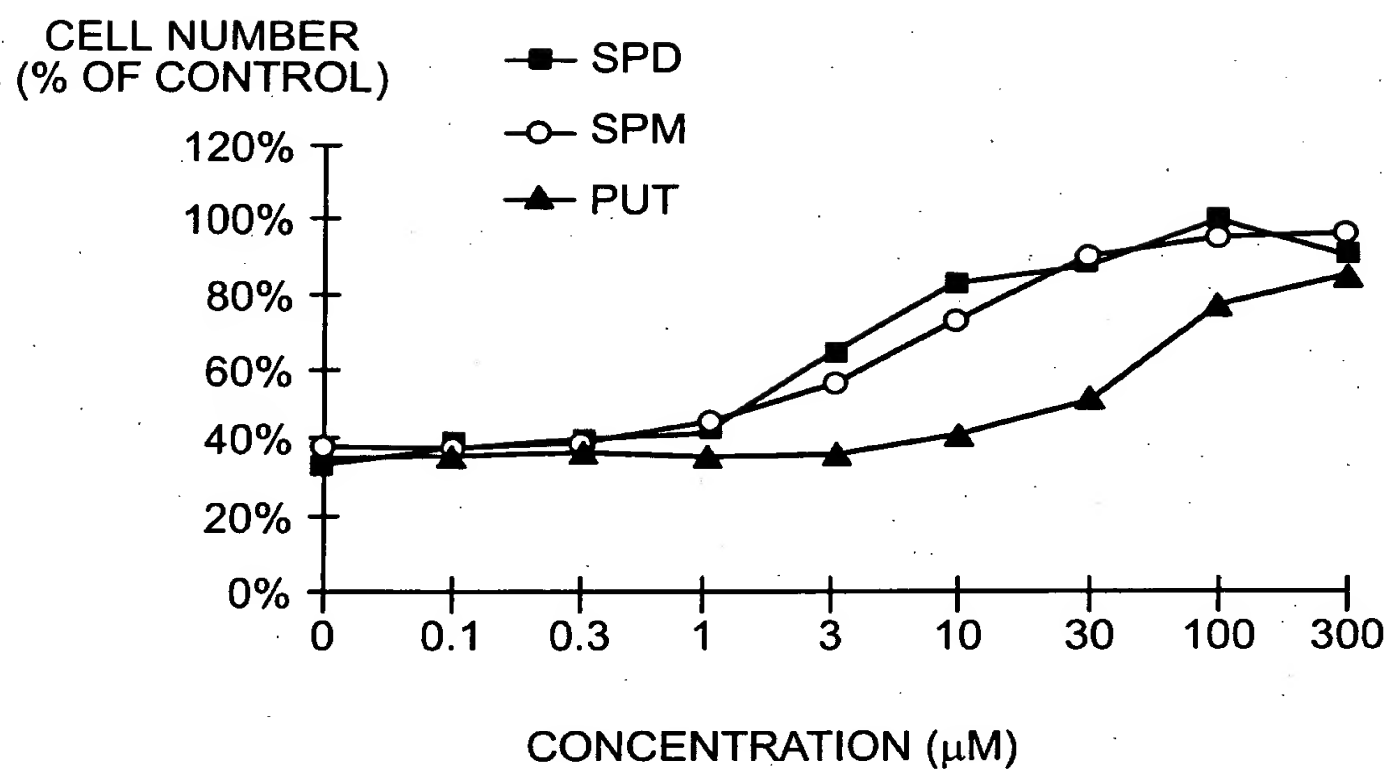
CELL NUMBER  
(% OF CONTROL)



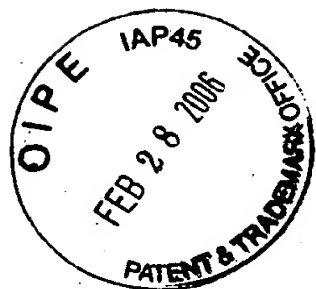
**FIG. 53**



REPLACEMENT SHEET

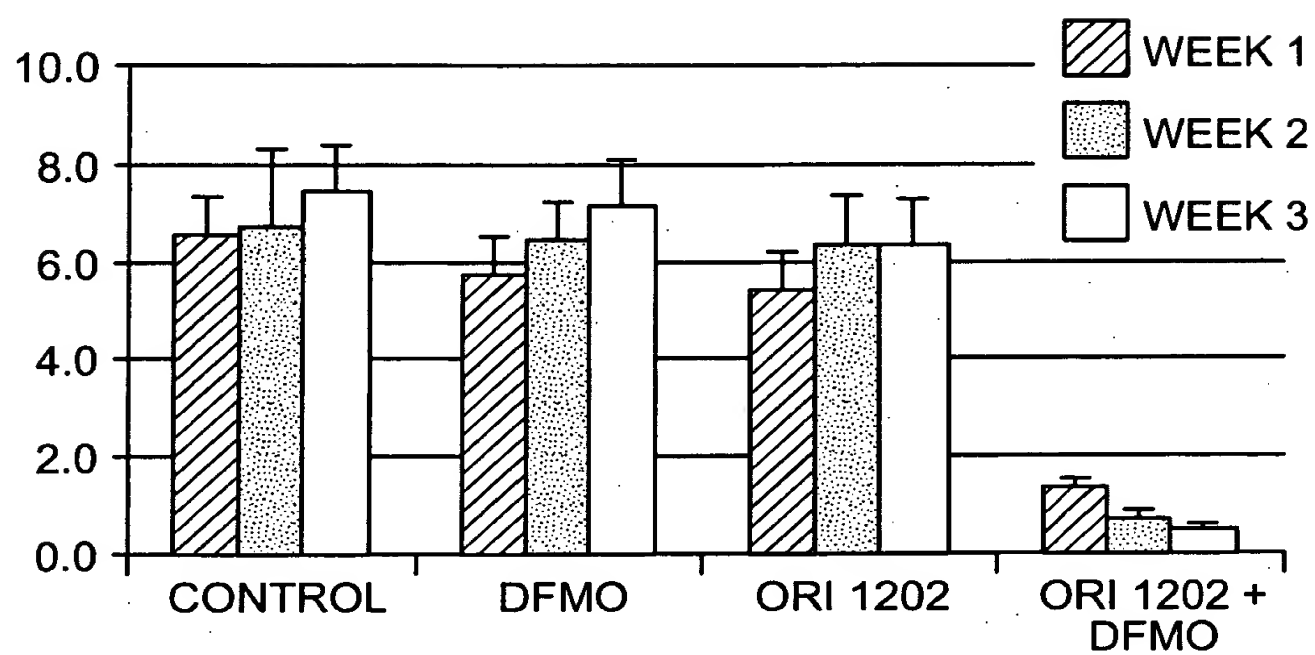


**FIG. 54**

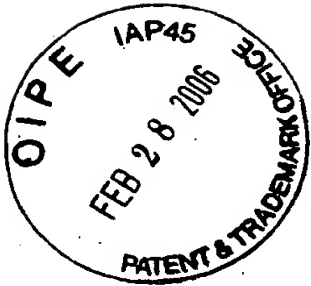


REPLACEMENT SHEET

CELL NUMBER  
( $\times 10^6$ ) / FLASK

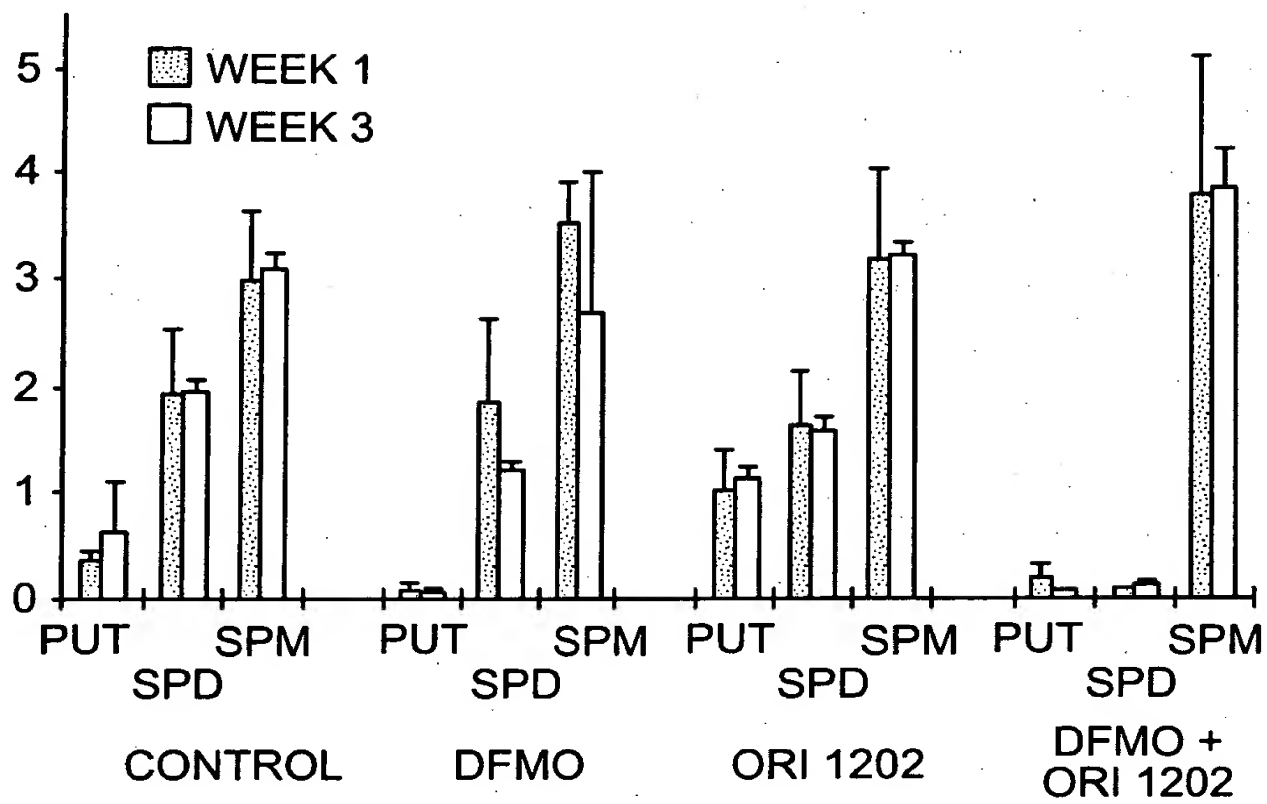


**FIG. 55**

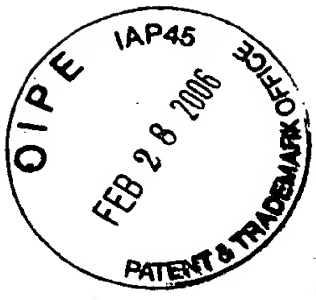


REPLACEMENT SHEET

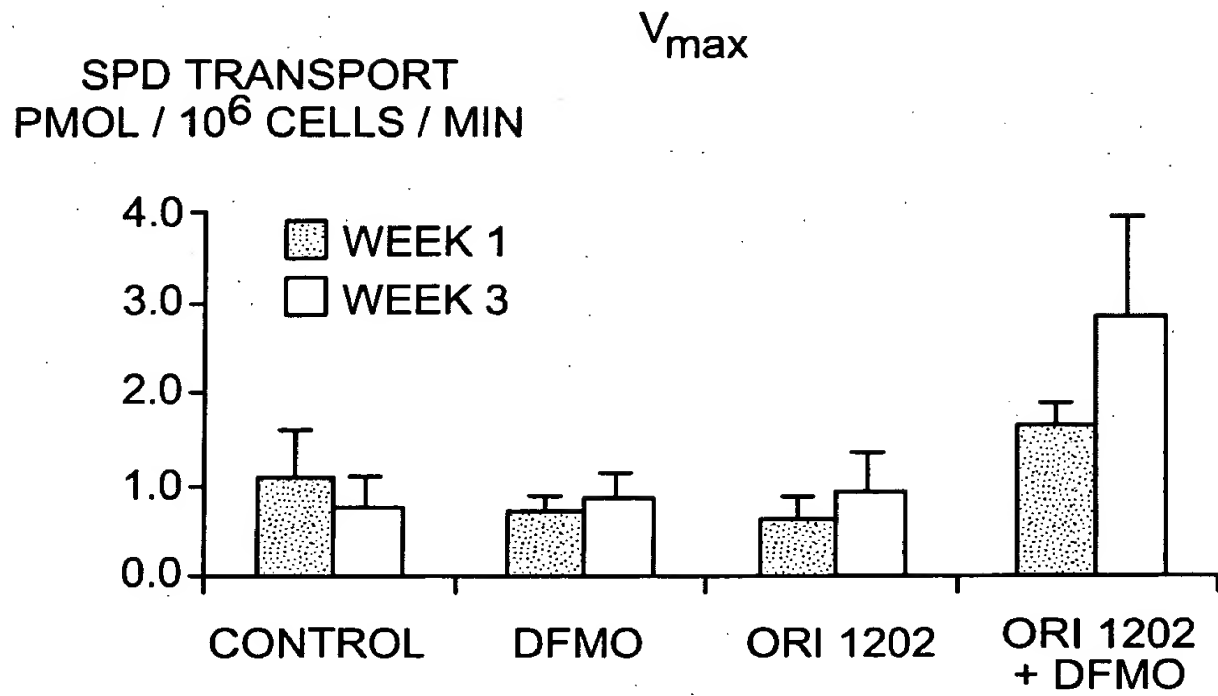
POLYAMINE LEVEL  
(PMOL/ 10<sup>6</sup> CELLS)



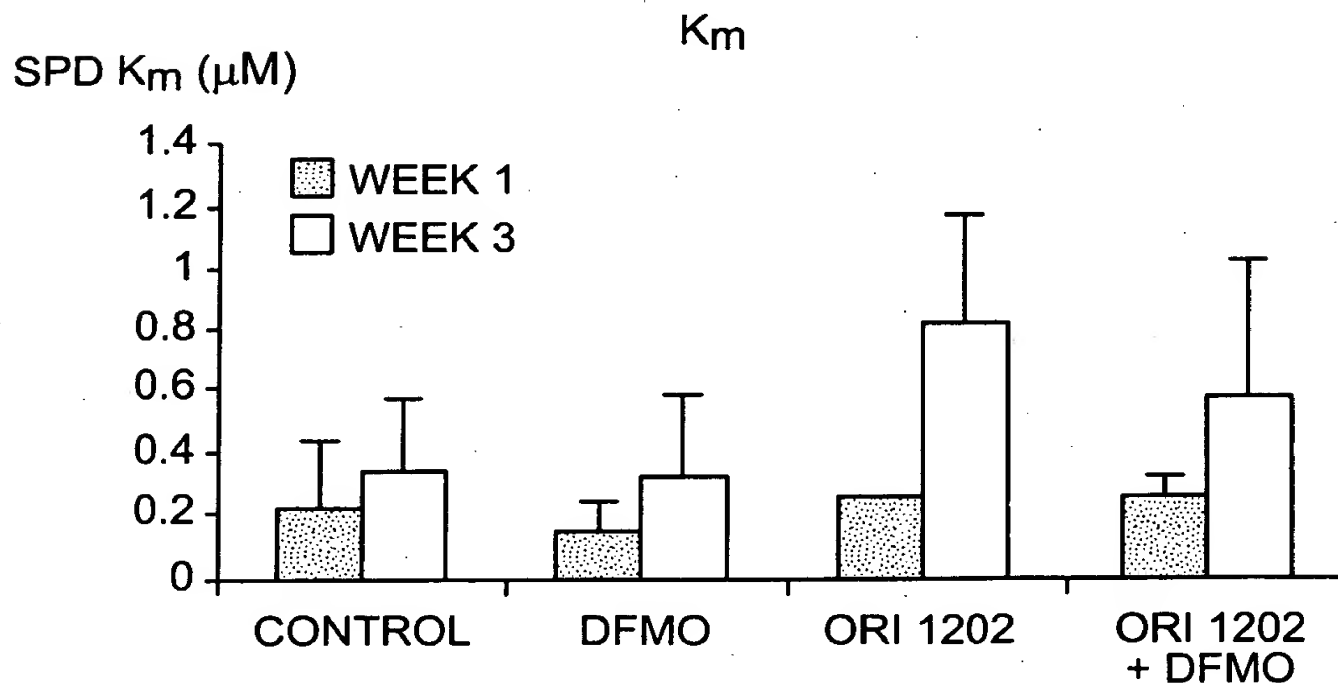
**FIG. 56**



REPLACEMENT SHEET



**FIG. 57A**



**FIG. 57B**

POLYAMINE LEVELS (pmol/MILLION CELLS) IN MDA CELLS AFTER EXPOSURE TO  
ORI 1202 (30 $\mu$ M)

	<u>0</u>	BACKGROUND					<u>1 HR.</u>	<u>2 HR.</u>	<u>6 HR.</u>
		<u>≤1 MIN.</u>	<u>10 MIN.</u>	<u>30 MIN.</u>					
ORI 1202		32.5 (1X)	198.5 (6.1X)	52.2 (1.6X)	40.2	85.3	48.5 (1.5X)		
SPM	591.7	606.8 (1X)	1955.2 (3.2X)	1038.2 (1.7X)	1071.17	1095.4	935.8 (1.5X)		
SPD	398.6	345.2 (1X)	358.3 (1.0X)	529.2 (1.5X)	554.6	591.8	519.5 (1.5X)		
PUT	217.5	180.2 (1X)	217.9 (1.2X)	269.2 (1.5X)	279.7	291.6	318.5 (1.8X)		

FIG. 58

